Worcestershire County Council

Agenda

Pensions Committee

Wednesday, 7 December 2016, 2.00 pm
County Hall, Worcester

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ਪੰਜਾਬੀ। ਜੇ ਤੁਸੀਂ ਇਸ ਦਸਤਾਵੇਜ਼ ਦਾ ਮਜ਼ਮੂਨ ਸਮਝ ਨਹੀਂ ਸਕਦੇ ਅਤੇ ਕਿਸੇ ਅਜਿਹੇ ਵਿਅਕਤੀ ਤੱਕ ਪਹੁੰਚ ਨਹੀਂ ਹੈ, ਜੋ ਇਸਦਾ ਤੁਹਾਡੇ ਲਈ ਅਨੁਵਾਦ ਕਰ ਸਕੇ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਮਦਦ ਲਈ 01905 765765 'ਤੇ ਫ਼ੋਨ ਕਰੋ। *(Punjabi)*

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DISCLOSING INTERESTS

There are now 2 types of interests:
'Disclosable pecuniary interests' and 'other disclosable interests'

WHAT IS A 'DISCLOSABLE PECUNIARY INTEREST' (DPI)?

- Any **employment**, office, trade or vocation carried on for profit or gain
- **Sponsorship** by a 3rd party of your member or election expenses
- Any **contract** for goods, services or works between the Council and you, a firm where you are a partner/director, or company in which you hold shares
- Interests in **land** in Worcestershire (including licence to occupy for a month or longer)
- **Shares** etc (with either a total nominal value above £25,000 or 1% of the total issued share capital) in companies with a place of business or land in Worcestershire.

NB Your DPIs include the interests of your spouse/partner as well as you

WHAT MUST I DO WITH A DPI?

- **Register** it within 28 days and
- **Declare** it where you have a DPI in a matter at a particular meeting
  - you must **not participate** and you **must withdraw**.

NB It is a criminal offence to participate in matters in which you have a DPI

WHAT ABOUT 'OTHER DISCLOSABLE INTERESTS'?

- No need to register them but
- You must **declare** them at a particular meeting where:
  You/your family/person or body with whom you are associated have a **pecuniary interest** in or **close connection** with the matter under discussion.

WHAT ABOUT MEMBERSHIP OF ANOTHER AUTHORITY OR PUBLIC BODY?

You will not normally even need to declare this as an interest. The only exception is where the conflict of interest is so significant it is seen as likely to prejudice your judgement of the public interest.

DO I HAVE TO WITHDRAW IF I HAVE A DISCLOSABLE INTEREST WHICH ISN'T A DPI?

Not normally. You must withdraw only if it:

- affects your **pecuniary interests OR**
  relates to a **planning or regulatory** matter
- **AND** it is seen as likely to **prejudice your judgement** of the public interest.

DON'T FORGET

- If you have a disclosable interest at a meeting you must **disclose both its existence and nature** – 'as noted/recorded' is insufficient
- **Declarations must relate to specific business** on the agenda
  - General scattergun declarations are not needed and achieve little
- Breaches of most of the **DPI provisions** are now **criminal offences** which may be referred to the police which can on conviction by a court lead to fines up to £5,000 and disqualification up to 5 years
- Formal **dispensation** in respect of interests can be sought in appropriate cases.

Simon Mallinson Head of Legal and Democratic Services July 2012 WCC/SPM summary/f

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Pensions Committee
Wednesday, 7 December 2016, 2.00 pm, County Hall, Worcester

Membership: Mr R W Banks (Chairman), Mr A I Hardman,
Mr R C Lunn (Vice Chairman), Mr R J Sutton and
Mr P A Tuthill

Coopted Members

Mr V Allison	Employer Representative
Mr A Becker	Employee Representative
Mr R J Phillips	Herefordshire Council

Agenda

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1	**Named Substitutes**	
2	**Apologies/Declarations of Interest**	
3	**Public Participation** *Members of the public wishing to take part should notify the Director of Resources in writing or by e-mail indicating the nature and content of their proposed participation no later than 9.00am on the working day before the meeting (in this case, 6 December 2016). Further details are available on the Council's website. Enquiries can be made through the telephone number/e-mail address below.*	
4	**Confirmation of Minutes** To confirm the Minutes of the meeting held on 26 September 2016 (previously circulated – pink pages)	
5	**LGPS Central Governance**	1 - 16
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All the above reports and supporting information can be accessed via the Council's website

Date of Issue: Monday, 28 November 2016

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AGENDA ITEM 5

PENSIONS COMMITTEE
7 DECEMBER 2016

LGPS CENTRAL GOVERNANCE

Recommendation

1. **The Chief Financial Officer recommends that the following recommendations be approved subject to a condition that a cost share agreement is agreed with all LGPS Central pool members that ensures value for money in the opinion of the Chief Financial Officer for the Worcestershire County Council Pension Fund from entering into the LGPS Central investment pool:**

   a) **To enter into a joint agreement with Derbyshire County Council, Leicestershire County Council, Nottinghamshire County Council, Shropshire Council, Staffordshire County Council, Wolverhampton City Council and Cheshire West and Chester Borough Council to establish a joint pension fund investment pool, in accordance with the requirements of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016; to be overseen by a Joint Committee established under s102 of the Local Government Act 1972;**

   b) **That Council be recommended to establish a Joint Committee with the participating authorities under s102 of the Local Government Act 1972 to oversee LGPS Central arrangements and that the Head of Legal and Democratic Services be authorised to finalise the formal terms of reference for such a Joint Committee in consultation with the Chief Financial Officer;**

   c) **That the Chairman of the Worcestershire County Council Pensions Committee, or his nominated representative be appointed act as the Council's representative on the Joint Committee;**

   d) **That the Director of Governance and the Director of Finance of Cheshire West and Chester Borough Council provide governance and administrative support to the Joint Committee on behalf of the participating Councils, subject to an appropriate cost sharing agreement agreed by the Chief Financial Officer in respect of officer time and other expenses;**

   e) **To become a joint shareholder of LGPS Central as a private company, limited by shares held solely by the participating funds, on a 'one fund, one vote' basis and incorporated for investment management purposes and regulated under the Financial Services and Markets Act 2000;**

f) That the Chairman of the Worcestershire County Council Pensions Committee, or his nominated representative, exercise the Council's voting rights as a shareholder of LGPS Central;

g) That the Chief Financial Officer represent the Council on a Practitioners Advisory Forum, providing joint officer support to the Joint Committee and Shareholders; and

h) To authorise delegated powers to the Chief Financial Officer to enter into all necessary legal agreements to establish a joint asset pool and investment management company, as outlined in this report, and to agree the Initial Strategic Plan and the Cost Sharing Schedule.

Purpose of the Report

2. This report outlines the changes that will be required to the operational and governance arrangements for the Worcestershire County Council Pension Fund following recent amendment of the LGPS Investment Regulations.

3. The revised regulations require all administering authorities in England and Wales to enter into joint (pooled) arrangements for the management of their investment assets, with effect from 1 April 2018, in order to achieve scale economies and increase investment capacity.

4. The Worcestershire County Council Pension Fund has been working with seven partner funds on a proposal which will meet the criteria for pooling laid down by the Secretary of State, by establishing a jointly owned investment management company, to be known as 'LGPS Central'.

5. The recommendations will allow the Council to comply with updated LGPS Investment Regulations which came into effect in November 2016, requiring all administering authorities to commit to an investment pooling arrangement which meets the criteria and guidance laid down by the Secretary of State in November 2015.

6. Where authorities fail to comply with the criteria and guidance, the Secretary of State has powers to intervene, and to issue a Direction requiring changes to investment strategies and investment management arrangements, or the transfer of the investment functions of an administering authority, either to himself or a nominated party.

7. The proposal to establish LGPS Central is supported by a comprehensive business case, which demonstrates the potential for significant savings in investment costs and management fees over the longer term for the pool as a whole, without detriment to investment performance and local accountability. However the business case for Worcestershire County Council Pension Fund on a value for money basis is dependent on the cost share agreement, which is currently being finalised.

Background

8. The LGPS is one of the largest funded pension schemes in the world with combined assets of around £200 billion. These are managed by 89 local

administering authorities, who historically, have maintained separate arrangements for the management of scheme assets, overseen by their respective Pension Fund Committees.

9. Between them it is estimated that administering authorities incur total administrative and management costs of around £500 million per year, a significant proportion of which relates to investment management fees paid to external fund managers. Funds often use the same managers, offering the same or similar services but appointed under separate agreements and on different fee terms.

10. Funds also vary significantly in scale; large funds enjoy direct access to a wide range of investment markets and products and can often negotiate more competitive fees, whilst smaller funds have more restricted options due to lower levels of investible resources, and expertise and have less negotiating power in the market.

11. Over the past two and half years the government has explored a number of options for improving the efficiency and sustainability of the scheme, and has undertaken extensive consultation on the potential to deliver savings through greater collaboration. A national cost benefit exercise, led by Hymans Robertson concluded that significant savings could be achieved through greater use of collective investment approaches, provided that certain regulatory restrictions were removed.

12. Subsequently, the government announced its intention to introduce a new regulatory framework which would facilitate collective investing and issued guidance and criteria to help administering authorities to develop proposals for pooling aimed at reducing costs and improving efficiency. Initial proposals were required by February 2016, followed by more detailed business case submissions in July 2016, with a target implementation date of 1st April 2018. The government also announced that 'backstop' powers would be introduced to allow the Secretary of State to intervene where authorities failed to bring forward sufficiently ambitious proposals in accordance with the guidance and criteria issued

LGPS Central

13. Prior to the government's announcement, the Worcestershire County Council Pension Fund has already established close working links with a number of other funds in, and around, the Midlands area and had begun to explore the scope for wider collaboration, starting with a successful joint procurement exercise in 2015, which resulted in a substantial fee saving on the funds' passively managed equity portfolio.

14. These informal links become the starting point for wide discussions in the context of the formal requirement for pooling, resulting in a joint proposal from Cheshire, Derbyshire, Leicestershire, Nottinghamshire, Shropshire, Staffordshire, West Midlands and Worcestershire to create 'LGPS Central', with combined assets of £35 billion.

15. Following confirmation from the Minister that this proposal was acceptable, a joint working group of officers, supported by external advisors, developed a detailed business case setting out how LGPS Central will meet the four key assessment criteria laid down by the government:

a) Criteria 1 – Asset pool(s) that achieve the benefits of scale (>£25billion);
b) Criteria 2 – Strong governance and decision-making;
c) Criteria 3 – Reduced costs and value for money; and
d) Criteria 4 - Improved capacity and capability to invest in infrastructure.

16. Detailed reports have been presented to the Worcestershire County Council Pensions Committee, explaining the key elements of the business case and seeking its approval for the proposed governance, oversight and management structure of the pool, which is summarised in Appendix 1 to this report.

17. The structure will allow participating funds to exercise control (both individually, and collectively) over the new arrangements, not only as investors in the pooled fund, but also as shareholders of the operator company.

18. Whilst assets will be managed on a pooled basis, each fund will be able to exercise their investor rights independently, although clearly, benefits of scale will most effectively harnessed where parties work together, in a co-ordinated way to align their decision-making. An important example would be social, environmental and governance policies and policies on the exercise of voting rights, where cross-voting between funds within the same pool would be both costly to administer and counter-productive.

19. The Joint Committee will be the forum for discussing common investor issues, and for collective monitoring of the performance of the pool against the objectives set out in the LGPS Central business case submission. It will however, have no formal decision-making powers and recommendations will require the approval of individual authorities, in accordance with their local constitutional arrangements.

20. The Shareholders, operating under company law, will have formal decision making powers. The Worcestershire County Council Pension Fund will have equal voting rights alongside the other participating funds, and unanimous decisions will be required on key strategic matters, which will be specified in the company Shareholders Agreement and Articles of Association. This will include the appointment and dismissal of the company's senior executives, approval of the company's strategic plan and any significant financial transactions, such as major acquisitions and lending or borrowing. A deadlock resolution procedure is included within the Shareholders Agreement, along with mediation and arbitration processes, if required, to resolve deadlocked decisions on key strategic matters.

21. The degree of control to be exercised by the Shareholders through their reserve powers will be greater than is generally the case, in order to satisfy the Teckal exemption criteria in the Procurement Regulations and allow the company to undertake services on behalf of the investor funds without a formal procurement process.

22. The government has also made clear their expectation that pooled entities must be registered with the Financial Conduct Authority (FCA) and regulated under the Financial Services and Markets Act 2000, to ensure appropriate safeguards over the management of client monies. As such, the new LGPS Central company will be subject to on-going oversight by the regulator and key management positions, including the company directors will need to be 'approved persons', able to demonstrate appropriate knowledge, expertise and track record in investment

management. They will also carry significant legal personal liability for their actions and decisions.

23. The relative merits of buying, or renting an established operator to manage the day to day running of the pool, have been carefully considered against the benefits of setting up a jointly owned company, with associated shareholder rights. The constituent funds unanimously agreed that the latter option, whilst more expensive, offers significant advantages in terms of great flexibility and control, and this is the basis upon which the business case has been developed.

24. Staff who are currently employed on behalf of the partner Funds to manage their investments will transfer under the Transfer of Undertakings (Protection of Employment) Regulations (TUPE) to the new company. As the Worcestershire County Council Pension Fund does not currently have an in-house investment team, no staff transfer implications are anticipated for the Council, although the ability to access internal investment resources through the pool offers potential for additional future savings.

25. The detailed business case has been reviewed by a joint DCLG/HMT Review Panel, and Ministerial consent to proceed has been received.

Impact on the role of the Worcestershire County Council Pension Fund Pension Committee

26. For the most part, the role of the Pensions Committee will be unaffected by the implementation of pooling and the creation of LGPS Central. The Pensions Committee will continue to be responsible for monitoring the overall management, performance and administration of the fund, and for setting investment strategy, including the overall allocation of assets, which is the critical factor in determining investment performance.

27. Importantly, the Pensions Committee will also continue to be responsible for communicating with individual scheme members, whose benefits are guaranteed in law, and are therefore not affected by the new pooling arrangements or investment performance.

28. Responsibility for appointing investment managers and overseeing their performance, including any decision to dismiss, will however transfer to the pool operator, as will tactical decisions on the implementation of the overall investment strategy and the choice of specific investment vehicles.

29. The role of the Pension Investment Advisory Panel will be more fundamentally impacted by the pooling proposals, as its remit is focussed specifically on the review of investment manager performance and other service provider issues, which will become the responsibility of the pool operator. With reduced terms of reference it may be that the residual role of the Advisory Panel could be subsumed back in to the main Pension Committee, thereby streamlining the overall governance arrangements and reducing the demands on Member time. It should be noted however, that the transition of assets into the pool is likely to be phased over a number of years, and that the Advisory Panel will have an important role in the interim in making sure that good governance is maintained over both transferred and non-transferred assets.

30. Changes to the terms of reference for the Pensions Committee and the Pension Investment Advisory Panel will be recommended to Full Council prior to the LGPS Central operation start date on 1 April 2018.

Pooling costs

31. The estimated cost of setting up the jointly owned company is up to £4m, this will be shared equally between the participating funds, with Worcestershire's share being around £500,000. There will also be significant transition costs as existing investment mandates are unwound and funds are transferred into new collective investment vehicles. It is not possible to accurately predict these costs, but the business case includes an estimate of £50m. Transition costs will also be shared between the funds on a fair and equitable basis.

32. In addition, as the new company will be a regulated entity under FCA rules, it will need to hold regulatory capital to guarantee its solvency. The regulatory capital requirement is expected to be in the region of £8m (£1m per fund).

33. If approved, Worcestershire's share of all costs (including the regulatory capital) will be met from the pension fund, and there will therefore be no direct impact on the Council's revenue or capital budgets.

34. Estimated net total savings for the pool are in the region of £182m over the period from 2018/19 to 2032/33, with annual savings of around £29m being achieved by the end of this period. However Worcestershire, over the planning period of 15 years, is forecast to incur additional costs of £0.3 million according to the Base Business Case. Following direction from the DCLG, this planning period has been extended to 16 years which has resulted in a small (£2,000) net benefit.

35. It is therefore of key importance to the Fund, due to the qualification attached to the recommendations in this report, that the Base Business Case be revised based on an updated cost share agreement that is currently to be finalised, to demonstrate value for money for the Fund before LGPS Central legal documents can be signed / sealed in April / May 2017.

LGPS Central key risks

36. The key risks are:

a) failure to achieve the statutory implementation deadline of 1 April 2018;
b) failure to manage costs and savings in line with the agreed business case;
c) failure to meet the requirements of the FCA regulator; and
d) failure to recruit appropriately skilled and experienced senior personnel to the new company.

37. Comprehensive programme governance arrangements are in place to ensure that the statutory deadline for the implementation of pooling is achieved and that costs and savings are managed in accordance with the business case. The s151 officers of each of the participating funds sit on the LGPS Central Programme Board and regular joint meetings are held between the Chairs and Vice-Chairs of the

respective Pension Fund Committees to ensure effective member oversight of progress and delivery. The Worcestershire County Council Pensions Committee and Local Pensions Board are also being updated regularly on key developments and decisions, as are the fund employers.

38. Expert advisers have been appointed to provide support on legal matters, FCA registration, taxation and overall programme management, and professional recruitment consultants are being appointed to assist and advise on executive recruitment and remuneration.

Operator setup options

39. The options of renting or buying an operator to manage the pool (rather than setting up a wholly owned company), have been considered and rejected due to market risk (limited supplier choice), and on governance grounds. The option of setting up a non-incorporated shared service arrangement has also been rejected due to significant regulatory risk.

Contact Points

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Supporting Information

- Eversheds- LGPS Central Governance Structure – Appendix 1
- Marcus Jones MP Letter to Central Pool – Appendix 2

Background Papers

In the opinion of the proper officer (in this case the Chief Financial Officer) the following are the background papers relating to the subject matter of this report:

LGPS Central business case submission to government 15 July 2016.

Agenda papers and Minutes of the meetings of the Committee held on 26 September 2016, 28 June 2016, 27 April 2016, 3 February 2016 and 14 December 2015.

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LGPS Central

Explanation of LGPS Central Governance Structure

19 October 2016

LGPS Central

Explanation of LGPS Central Governance Structure

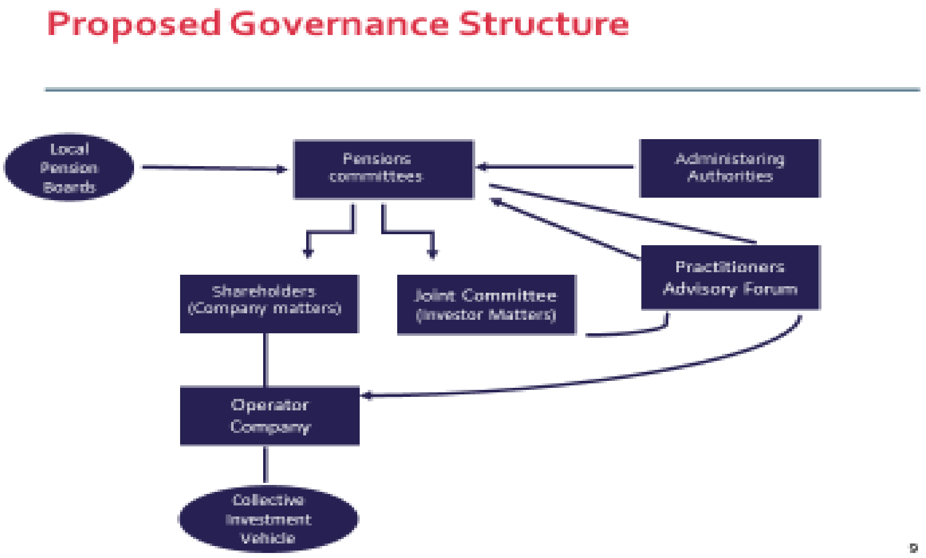
This advice note has been prepared solely for LGPS Central (and its participating authorities), and unless expressly agreed in writing, we do not accept liability to any other person in respect of the advice provided.

Detailed advice

1. **Background**

We have been asked to provide a high level summary of the LGPS Central governance structure, in particular setting out the roles and interactions of the key bodies, including LGPS Central Limited, the shareholder representatives, the joint committee and the Practitioners Advisory Forum.

In broad terms the structure is summarised in the following diagram:


Proposed Governance Structure
Local Pension Boards
Pensions committees
Administering Authorities
Practitioners Advisory Forum
Shareholders (Company matters)
Joint Committee (Investor Matters)
Operator Company
Collective Investment Vehicle
9

Joint Committee

1.1 The Joint Committee will be the forum for dealing with common investor issues relating to the Operator and the ACS.

1.2 Each administering authority will be individual investors in the ACS (and any other pooled vehicles managed by the Operator) and each will have investor rights afforded by the suite of key documents which, in the case of the ACS, are made up of the constitutive deed, application form, key investor information, prospectus and FCA handbook of rules and guidance. These investor rights are embedded in those documents and cover matters including the right to withdraw from the pooled vehicle, investor reporting (including frequency and content) and investor voting rights (including on proposed changes to the pooled vehicle).

1.3 We understand that the administering authorities do not want to delegate their actual key decision making powers or investor rights to the Joint Committee. Instead these will be retained for exercise by the individual authorities subject to consideration of any recommendations the Joint Committee may make.

1.4 It is expected the Joint Committee will meet twice a year (with support from the Practitioners Advisory Forum) to discuss and agree a common consensus view on investor issues such as:

1.4.1 concerns over Operator service delivery and KPIs,

1.4.2 matters requiring investor approval; and

1.4.3 other Pool related investment issues, for example adopting common approaches to investment policies (for example common social, environmental and corporate governance policies or policies on voting rights).

1.5 The Joint Committee would not make binding decisions on these issues but would make recommendations back to each authority (via the Practitioners Advisory Forum) to individually approve.

1.6 Given the limited delegation to the Joint Committee, a formal joint committee structure is not the only way this part of the governance structure could be delivered. However, a joint committee structure provides a tried and tested structure that delivers a clear and transparent separation of shareholder matters and investor matters. On the other hand, a formal joint committee structure equals adds a level of bureaucracy, cost and effort which the structure would necessitate. Pros and cons of a joint committee structure are set out below.

Shareholder Representatives

1.7 Shareholder meetings will be the forum for dealing with the shareholder rights of the administering authorities as shareholder in the Operator. This is distinct from investor/customers issues dealt with by the Joint Committee.

1.8 Certain major decisions (e.g. changes to articles of association, rights in shares, buy-back of shares etc) which would have an effect on the shareholders' rights are usually required, through the Companies Act 2006, to be approved by the shareholders at a general meeting called by the directors of the company. Shareholders can also via a Shareholders' Agreement provide that the company can only take certain actions with their prior approval (such as adopting strategic plan, board changes, entry into/termination of certain key contracts, changes to key employee terms and conditions).

1.9 In order to retain sufficient control over the company to address 'Teckal' issues from a procurement perspective, the Shareholders Agreement needs to provide that certain key strategic shareholder decisions will require unanimous approval of all the shareholders before they can be approved at a shareholder meeting.

1.10 Meetings of the shareholders are subject to the requirements of the Articles of Association of the Operator, the terms of the Shareholders Agreement and general company law. They are therefore subject to different rules to a Joint Committee meeting (e.g. access to information and voting rules) and for this reason need to be kept separate.

1.11 Each authority will be represented at shareholder meetings by an appointed representative of that authority. This may or may not be the same individual that represents the authority on the Joint Committee. It is intended that shareholders will meet quarterly.

1.12 Having different individuals at the shareholder level and on the Joint Committee would clearly help to manage conflicts of interest (should they arise) and may assist in retaining clarity of governance functions being carried out. However it would be possible to put in place an appropriate conflicts policy to deal with potential conflicts.

Practitioners Advisory Forum

1.13 The Forum will be made up of an officer from each administering authority (such as the Section 151 officer or a pension fund officer). The Forum is not a legal entity but a working group of officers. The terms of the Forum will be set out in an Inter Authority Agreement confirming how the Forum will be comprised, operate and be resourced and funded.

1.14 As this is a working group of officers, no statutory functions can be delegated to the Forum. The Role of the Forum is:

1.14.1 To support the meetings of the Joint Committee and action its recommendations;

1.14.2 To act as a mechanism to facilitate discussions between the individual administering authorities as investors and the Operator; and

1.14.3 To analyse the Pool-wide investment performance of the Operator, including its investment costs, customer service and delivery of wider investor services such as voting and responsible investment. They will also review risk management and compliance arrangements from an investor perspective.

1.15 The Practitioners Advisory Forum would not have a formal role at shareholder meetings but could attend to deliver presentations etc.

2. Pros and Cons Analysis

PROS OF A JOINT COMMITTEE	CONS OF A JOINT COMMITTEE
Tried and tested structure used by local authorities to provide joint working arrangements.	In the absence of the delegation of material administering authority powers, it entails the creation of a formal structure that doesn't make actual decisions and involves additional time and cost.
Subject to clear and certain public law rules governing the operation of joint committee meetings (even if its actual delegated powers are very limited).	In this case, the operation of the Joint Committee is more formal and therefore open to public access that it necessarily needs to be.
Provide a clear and visible separation of shareholder matters and investor matters (especially if different representatives attend shareholder meetings) which would help to manage conflicts (especially if different representatives were on these two bodies).	The costs of operating and supporting a Joint Committee structure will be more expensive than alternative solutions. However, if the Committee only meets twice a year this will be limited.
Provides openness and transparency from a public access perspective in terms of access to minutes and papers. This would avoid potential criticism that the authorities are not acting in a transparent manner (especially given that shareholder meetings will be private).	The different rules covering meetings of shareholders and Joint Committee meetings can cause confusion especially if the representatives are the same individuals and meetings are held consecutively. The role of the same chair (ideally with an understanding of shareholder meetings and company law) on both bodies will be vital to manage the meetings in the appropriate way.
Potentially reduces the risk that other meetings (including shareholder meetings) taking place are perceived as being meetings at which collective authority positions are being influenced which should have been subject to rules on local authority meetings.	
To the outside world it represents confirmation that authorities are working collaboratively (and are seeking to manage the joint arrangements collectively and consistently). Adoption of a Joint Committee would be a recognition of the changes being made in the way the LGPS pension funds are being managed/invested i.e. collectively and is not simply continuation of business as before.	
In the event wider powers do need to be delegated to the Joint Committee in the future (or on an ad hoc basis) there would be an existing structure in place to facilitate this.	

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Ms Geik Drever
Programme Director
LGPS Central

On behalf of the participating funds:
Cheshire Pension Fund
Derbyshire Pension Fund
Nottinghamshire County Council Pension Fund
Leicestershire County Council Pension Fund
Staffordshire Pension Fund
Shropshire County Pension Fund
West Midlands Pension Fund
West Midlands ITA Pension Fund
Worcestershire County Council Pension Fund

Dear Geik,

LGPS CENTRAL INVESTMENT POOL: FINAL PROPOSAL

I would like to thank you and all the authorities involved in the proposed Central pool for your final proposal, which we discussed at our meeting on 15 November. I was glad to note your strong commercial approach and commitment to use scale to drive down fees and improve transparency on costs, as well as your ambition to increase infrastructure investment. I appreciate the hard work and commitment from elected members and officers which the proposal represents, and welcome your determination to deliver on time.

It is now coming up to a year since we set the framework for reform of the investment function of the local government pension scheme, through the guidance and criteria for pooling published in November 2015. I am pleased that authorities across the scheme have responded to the challenge and come together to form partnerships of their own choosing based on a shared view of investment strategy. We do not underestimate the scale of the changes required, but the Government remains committed to pooling in order to deliver reduced costs while maintaining performance as well as to develop capacity and capability for greater investment in infrastructure.

I appreciate that overall costs are likely to rise in the early years, and that salaries are likely to be high for key senior roles within pool operators. But I consider that this is a price worth paying in order to achieve substantial savings, already estimated by the pools at £1-2 billion by 2033 or up to £200 million pa in the medium term. I am confident that as the reform beds in, there are further savings to be achieved.

I therefore expect every administering authority in England and Wales to participate in a pool. I also expect authorities to place all assets in their chosen pool, unless there is a strong value for money case for delay, taking into account the potential benefits across the pool. In addition my officials will be consulting with all pools on the potential to work with the Local Pensions Partnership to help ensure it delivers the full benefits of scale.

I must also underline that all bodies effectively undertaking collective investments will need to be authorised at the appropriate level by the Financial Conduct Authority (FCA). I appreciate the significant costs and effort required to secure authorisation. However, given the scale and complexity of the pools, and the substantial public funds involved, scheme members and the local taxpayers who underpin the scheme have a right to expect the high level of assurance which is provided by FCA authorisation. Individual funds will continue to be responsible for their investment strategies and asset allocation and will continue to require high standards of governance.

On the basis set out above I am pleased to confirm that I am content for you to proceed as set out in your final proposal.

Turning to the future, I appreciate there has been some delay this autumn, but I have no plans to extend the deadline for pools to become operational in April 2018. I will be reviewing progress of all the pools in spring and autumn 2017 and will expect to see a core team in place in spring 2017 and an application for Financial Conduct Authority authorisation, where not already in place, in autumn 2017. I look forward to seeing more detailed plans for delivering savings, and increasing your infrastructure investment in line with your stated ambition. I will also expect detailed plans for reporting, including on fees and net performance in each listed asset class against an index, standardised across the sector.

Marcus Jones

MARCUS JONES MP

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AGENDA ITEM 6

PENSIONS COMMITTEE
7 DECEMBER 2016

STRATEGIC ASSET ALLOCATION REVIEW

Recommendation

1. **The Chief Financial Officer recommends that:**

   a) **The allocation to Infrastructure or a mix of Infrastructure and Real Estate be increased by 5% from the current strategic allocation of up to 10% of the Fund to 15%;**

   b) **The Chief Financial Officer be granted delegated authority in consultation with the Chairman and Vice-Chairman of the Pensions Committee to procure appropriate investment managers to secure increases to existing investments or enter into new investments;**

   c) **The Fund's existing investment into both Property and Infrastructure result in Capital distributions in between Strategic Asset Allocation reviews as the capital element of those investments be depreciated;**

   d) **A "rolling" investment programme be introduced for Property and Infrastructure investments to reinvest distributions that are received in that way in order that actual investment in this asset class is maintained at the levels up to those indicated in this Strategic Asset Allocation;**

   e) **The Fund's allocation to alternative indices be increased by 5%, which is conditional on recommendation 'f', from the current strategic allocation of up to 10% of the Fund to 15% equities allocation;**

   f) **Fund officers be authorised with the support of the Fund's current alternative indices investment Manager, Legal and General Asset Management, to also consider the appropriate balance of alternative indices to support the Fund's investment objectives. The 5% increase to alternative indices, recommendation 'e', is to be conditional on the Chair of the Pensions Committee approving the proposed balance of alternative indices;**

   g) **To fund the above structural asset allocation changes the asset allocation structural changes be implemented through an overall 2% reduction to each regional market capitalisation indices passive and active Equity allocation;**

   h) **The Strategic Asset Allocation to North American Equities be returned to Passive Management;**

   i) **The Fund's current global corporate Bonds strategy be maintained;**

   j) **Tolerance ranges as set out in Table 1 of the Appendix be implemented and maintained to allow the required portfolio flexibility;**

   k) **The Pension Investment Advisory Panel be tasked with overseeing further due diligence to be carried out on JP Morgan to confirm the application of their style given the slight bias to growth since 2010 indicated within this review;**

l) A review of the Fund's exposure to currency and inflation risks be carried out at appropriate intervals, given the global nature of the Fund's investments as well as the bias towards Equities;

m) A review of regional Equity weightings and the Fund's Bonds Strategy be carried out before assets are transferred to LGPS Central Pool. Once transitioned to the Pool, a review of regional Equity weightings is recommended to form part of a more dynamic approach to asset allocation undertaken by the Pension Committee; and

n) The Bonds Investment Strategy be reviewed before transitioning assets into LGPS Central Pool.

Background

2. Every three years the Fund takes stock of the performance and composition of the Fund's Strategic Asset Allocation with the aims of:

   i. meeting the requirements of the Fund's draft 2016 Funding Strategy Statement;

   ii. maintaining targeted returns, and

   iii. improving the Fund's opportunity to minimise volatility of returns and optimising diversification of risk.

3. The Fund's Funding Strategy Statement is not proposed to change as a result of the 2016 Actuarial Revaluation and therefore the aim of the Strategic Asset Allocation should remain unchanged from that endorsed by the Shadow Pensions Committee as a result of the 2013 valuation.

4. The Pensions Committee should note that it is being asked to 'approve' rather than 'endorse' recommendations set out in this review due to the change in Scheme Manager arrangements from the Chief Financial Officer of the Administering Authority to the Pensions Committee in 2014

5. The recommendations above are to enable the Fund to continue to meet the assumptions contained within the Fund's Funding Strategy Statement with regards to ongoing expected returns in excess of CPI inflation and also take into account Central Government's asset pooling agenda and the establishment of the LGPS Central pool on 1 April 2018.

6. No recommendations at this stage are being made in relation to the appointment of Investment Managers as these will naturally fall to the continued plan of reviews. Recommendations have also be made in accordance with the other responsibilities of the Pensions Committee to be included in the Forward Plan of the Pensions Committee.

7. The Strategic Asset Allocation Review report is attached as an appendix to this report.

Contact Points

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Specific Contact Points for this report
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Supporting Information

- Strategic Asset Allocation Review (Appendix)

Background Papers

In the opinion of the proper officer (in this case the Chief Financial Officer) there are no background papers relating to the subject matter of this report.

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Worcestershire County Council Pension Fund

Strategic Asset Allocation Review November 2016

1 Purpose of Report

1.1 The Worcestershire County Council Pension Fund (the Fund) is valued at £2.3 billion as at the end of October 2016. The Fund's value has risen by £615 million since the last triennial valuation in 2013 when it was valued at £1.7 billion.

1.2 The purpose of this Strategic Asset Allocation Report is two-fold:

a) to take stock on the performance and composition of the Fund's Strategic Asset Allocation as endorsed by the Shadow Pensions Committee in 2013;

b) to recommend for approval any changes required to the Fund's Strategic Asset Allocation with the aims of:

i. meeting the requirements of the Fund's draft 2016 Funding Strategy Statement;

ii. maintaining targeted returns, and

iii. improving the Fund's opportunity to minimise volatility of returns and optimising diversification of risk,

2 Summary of Recommendations

2.1 The Fund's Funding Strategy Statement is not proposed to change as a result of the 2016 Actuarial Revaluation and therefore the aim of the Strategic Asset Allocation should remain unchanged from that endorsed by the Shadow Pensions Committee as a result of the 2013 valuation.

2.2 The Pensions Committee should note that it is being asked to 'approve' rather than 'endorse' recommendations set out in this review due to the change in Scheme Manager from the Chief Financial Officer of the Administering Authority to the Pensions Committee in 2014.

2.3 Set out below is a summary of the recommendations contained in this report for approval at the Pensions Committee. The recommendations are to enable the Fund to continue to meet the assumptions contained within the Fund's Funding Strategy Statement with regards to ongoing expected returns in excess of CPI inflation and also take into account Central Government's asset pooling agenda and the establishment of the LGPS Central pool on 1st April 2018:

a) Recommendation 1 (paragraph 12.29).

Increase the allocation to Infrastructure or a mix of Infrastructure and Real Estate by 5% from the current strategic allocation of up to 10% of the Fund to 15%.

Delegation is sought for the Chief Financial Officer in consultation with the Chair of the Pensions Committee to procure appropriate investment managers to secure increases to existing investments or enter into new investments.

b) Recommendation 2 (paragraph 12.30).

The Fund's existing investment into both Property and Infrastructure result in Capital distributions in between Strategic Asset Allocation reviews as the capital element of those investments is depreciated.

Therefore, a "rolling" investment programme is proposed to be introduced for Property and Infrastructure investments to reinvest distributions that are received in that way in order that actual investment in this asset class is maintained at the levels up to those indicated in this Strategic Asset Allocation.

c) Recommendation 3 (paragraph 11.22 and 11.23).

Increase the Fund's allocation to alternative indices by 5% from the current strategic allocation of up to 10% of the Fund to 15% equities allocation.

Approval is sought for Fund officers with the support of the Fund's current alternative indices investment Manager, Legal and General Asset Management, to also consider the appropriate balance of alternative indices to support the Fund's investment objectives.

The 5% increase to alternative indices is to be conditional on the Chair of the Pensions Committee approving the proposed balance of alternative indices.

d) Recommendation 4 (paragraph 14.3)

To fund the above structural asset allocation changes, it is recommended that the asset allocation structural changes be implemented through an overall 2% reduction to each regional market capitalisation indices passive and active Equity allocation.

e) Recommendation 5 (paragraph 11.9).

The Fund returns the Strategic Asset Allocation to North American Equities to Passive Management.

f) Recommendation 6 (paragraph 12.7).

Maintain the Fund's current global corporate Bonds strategy.

g) Recommendation 7 (paragraph 14.8).

Tolerance ranges as set out below are implemented and maintained to allow the required portfolio flexibility.

Table 1: Summary Changes to the Strategic Asset Allocation

By Review Year	**2013**		**2016**	
Asset Type by %	**Allocation**	**Tolerance**	**Allocation**	**Tolerance**
Equities	80	75 – 90	75	70 - 85
Bonds	10	5 – 15	10	5 – 15
Infrastructure and Property	10	5 – 10	15	5 – 15

2.4 In addition to the recommendations set out above in relation to the Strategic Asset Allocation, no recommendations at this stage are being made in relation to the appointment of Investment Managers as these will naturally fall to the continued plan of reviews.

2.5 The following actions are recommended in accordance with the other responsibilities of the Pensions Committee to be included in the Forward Plan of the Pensions Committee.

a) Recommendation 8 (paragraph 11.16).

The Pension Investment Advisory Panel is tasked with overseeing further due diligence to be carried out on JP Morgan to confirm the application of their style given the slight bias to growth since 2010 indicated within this review.

b) Recommendation 9 (paragraph 12.23).

To plan in at appropriate intervals the Fund's exposure to currency and inflation risks given the global nature of the Fund's investments as well as the bias towards Equities.

c) Recommendation 10 (paragraph 10.18).

A review of regional Equity weightings and the Fund's Bonds Strategy is carried out before assets are transferred to LGPS Central pool. Once transitioned to the pool, a review of regional Equity weightings is recommended to form part of a more dynamic approach to asset allocation undertaken by the Pension Committee.

It is further recommended that the Bonds investment strategy is reviewed before transitioning assets into LGPS Central pool.

3 Setting the Scene for the Strategic Asset Allocation Review

3.1 This section sets out the emerging findings of the Triennial Actuarial valuation and summarises progress being made with Central Government's Local Government Pension Scheme (LGPS) reforms including the development of LGPS Central.

Triennial Actuarial Valuation

3.2 The Fund is nearing conclusion on its discussions with the Actuary, Mercer, on the triennial valuation. A full report will be presented to the Pension Committee at its meeting on 7 December 2016. In summary, the likely outcome will be:

a) Recognition of excess returns above Actuarial estimates made as part of the 2013 triennial actuarial valuation;

b) A decrease in the level of deficit mainly due to a change in methodology for valuing liabilities from Gilts to CPI+; and

c) An increase in the funding level from 69% to 76% with a similar funding strategy required.

3.3 This means that there is not a need to alter the Fund's Funding Strategy Statement in any significant way and therefore the aims of its investment strategy remain intact.

3.4 The Actuary has reflected on the Fund's ability to manage any future risk around inflationary pressures and volatility of returns and asset valuations due to the Fund's bias towards Equity as an asset class.

3.5 Whilst this bias is a conscious one that members of the Pensions Committee will be familiar with, it should also be recognised that the strategic allocation to this asset class has reduced from 90% in the 2010 Strategic Asset Allocation to 80% in the 2013 Strategic Asset Allocation. This reduction has been matched by an increase in Property and Infrastructure as an asset class, which by their nature have moved inherent protections against future inflationary pressures and historically have been less volatile in terms of valuation that Equities.

LGPS reforms

3.6 In the July Budget 2015, the Chancellor at the time announced Central Government’s intention to work with LGPS Scheme administering authorities to ensure that they pool investments to significantly reduce costs while maintaining overall investment performance.

3.7 On 25 November 2015, DCLG published its response to the May 2014 consultation (Opportunities for collaboration, cost savings and efficiencies). It said responsibility for asset allocation would stay with the 90 administering authorities and that savings could be delivered through the use of asset pooling and, in particular, collective investment vehicles.

3.8 Following discussions with local government and the fund management industry over the summer, Central Government prepared criteria against which the authorities’ proposals for pooling would be assessed. Authorities were asked to develop proposals for pooling assets in line with the timeline detailed below.

3.9 The 4 main pooling criteria are:

- Criteria 1: Asset pool(s) that achieve the benefits of scale c. £25bn
- Criteria 2: Strong governance and decision making
- Criteria 3: Reduced costs and excellent value for money
- Criteria 4: An improved capacity and capability to invest in infrastructure

3.10 Strategic asset allocation will remain a local decision for the administering authority and local pension committee. The pool will decide on investment manager appointments and the type and number of sub-funds. Elected members of each Fund will influence how each pool operates.

3.11 The Fund in collaboration with eight other Local Authorities under the brand ‘LGPS Central’ submitted their initial proposals to the Government by 19 February 2016.

3.12 Central Government responded to LGPS Central's February submission on 24 March 2016 welcoming the initial proposal and encouraged the pool to continue with the planned work to develop a detailed submission that fully addresses the criteria by 15 July 2016.

3.13 On 15 July 2016 LGPS Central made a final submission, including a Full Business Case, which fully addressed the criteria set out above, with enough information for the proposal to be evaluated by Central Government. Each pool made a submission which covered the proposals and described the proposed governance, structure and implementation plan.

3.14 The [September 2016] meeting of the Pensions Committee provided the Fund's Chief Financial Officer with delegation of up to [£0.4 million] to support the development of LGPS Central into an FCA Authorised ACS organisation with a proposal for launch by February 2018. Representatives from LGPS Central are meeting representatives from Central Government on 15 November 2016 to provide an update on current progress and received feedback. A verbal update will be provided on the outcome of this meeting to the Pension's Committee.

4 Taking Stock: Summarising the current Strategic Asset Allocation

4.1 The current long term strategic asset allocation for the Fund is listed below in Table 2:

Table 2

Asset Allocation	%	Manager, Method & Performance Target
Actively Managed Equities		
Far East Developed	12.0	Nomura Asset Management - FTSE All World Asia Pacific Index + 1.5%
Emerging Markets	12.0	JP Morgan Asset Management and Schroder Investment Management - FTSE - All World Emerging Market Index +2.0%
Passively Managed Equities - Market Capitalisation Indices		
United Kingdom	25.5	Legal and General Asset Management - FTSE All Share Index
North America	11.0	Legal and General Asset Management - FTSE All World North America - Developed Series Index
Europe ex - UK	9.5	Legal and General Asset Management - FTSE All World Europe ex UK Index - Developed Series Index

Asset Allocation	%	Manager, Method & Performance Target
Passively Managed Equities – Alternative Indices		
Global	10.0	Legal and General Asset Management: - 1/3 GPAE - FTSE-RAFI Dev. 1000 Equity Fund - 1/3 GPBK - MSCI World Mini Volatility Index - 1/3 STAJ - CSUF - STAJ MF36726/36727
Bonds Managed Actively	10.0	JP Morgan Asset Management - 100% Barclays Global Aggregate Corporate Bond Index – Hedged into GBP
Property & Infrastructure	10.0	Through a mix of Green Investment Bank, Invesco, Hermes, Walton Street and Venn Partners
	100.0	

5 Taking Stock: Overview of the Fund's current investment strategy

5.1 The current asset allocation has maintained a clear but reduced focus on equity assets. Equities are recognised as a growth asset class and can be both passively managed (linked to the respective indices) and actively managed. In addition to equities, the Fund targets a 10% investment into global corporate bonds. Following the endorsed recommendation, at the 2013 asset allocation review pension committee meeting, to transition 10% of the fund's assets from equities to property and alternatives, the fund currently has a commitment of 10% of its assets to a combination of five property and infrastructure pooled funds.

5.2 The Fund is low cost compared to the LGPS average Fund and to the other members of the LGPS Central pool. Significant work has been carried out over the past few years to negotiate fee discounts with the Fund's active managers and to gain savings through the joint re-procurement of the passive mandate.

5.3 The following Table 3 sets out the current Fund asset allocation as compared to the Local Authority average asset allocation as at 31st March 2016 derived from the WM universe. This universe does not differentiate between passive and active management.

Table 3: Comparison of Fund against Local Authority average

Asset Class	Fund	Local Authority Average*
	%	%
Equities	85.6	60.1
Bonds	6.1	16.4
Property	4.5	9.1
Alternatives	3.8	8.7
Cash	0.0	2.9
Pooled Multi Asset	0.0	2.8
Total	100.0	100.0

*The information for comparison is taken from the WM UK Local Authority Annual Review 2015/16

5.4 After taking the Fund's recent transition from equities to property and infrastructure into account, the Fund's allocation to Equities as an asset class remains significantly higher than the mean allocation. While this in itself is not necessarily a bad thing while the strategy works, it does expose the Fund to substantially increased volatility in performance when equities are out of favour, as has been seen over recent history.

5.5 The Fund's liabilities are now discounted by a CPI+ methodology, giving more stable liabilities going forwards. Significant volatility in the Fund's asset value will directly impact on the funding level and subsequent recovery plans, rather than being potentially offset by increases in gilt rates, which were previously used as the discounting factor for the liabilities. Therefore the Pensions Committee should note this risk that the Fund holds and whilst this risk may be reduced by exposure to this Asset Class, the Fund still needs to recover a Funding Deficit in line with its Funding Strategy Statement.

5.6 The Pensions Regulator now holds an oversight role for LGPS Funds, and along with GAD and the LGPS Scheme Advisory Board will be monitoring funding levels and recovery plans closely in future years.

a) The five asset classes currently utilised by the Fund are summarised below. Active equities

To justify the higher cost of management and the greater risk profile, it is reasonable to assume that higher rewards should come from this element. For this to be fully effective it has been expected that appointed managers should have a high level of conviction in their stock selections and therefore be relatively unconstrained within their mandate.

b) Passive equities

These investments remove the risk of potential poor performance from active managers. These investments do not remove the impact on fund values from oscillations in the tracked indices. We have seen considerable volatility in world markets over the last decade or so, this may well continue.

c) Corporate Bonds

A corporate bond is a bond issued by a corporation in order to raise financing for a variety of reasons such as to on-going operations, M&A, or to expand business. The term is usually applied to longer-term debt instruments, with maturity of at least one year.

d) Property pooled funds

A Property pooled fund is a type of mutual fund that primarily focuses on investing in securities offered by public real estate companies. The majority of real estate funds are invested in commercial and corporate properties, although they also may include investments in raw land, apartment complexes and agricultural space.

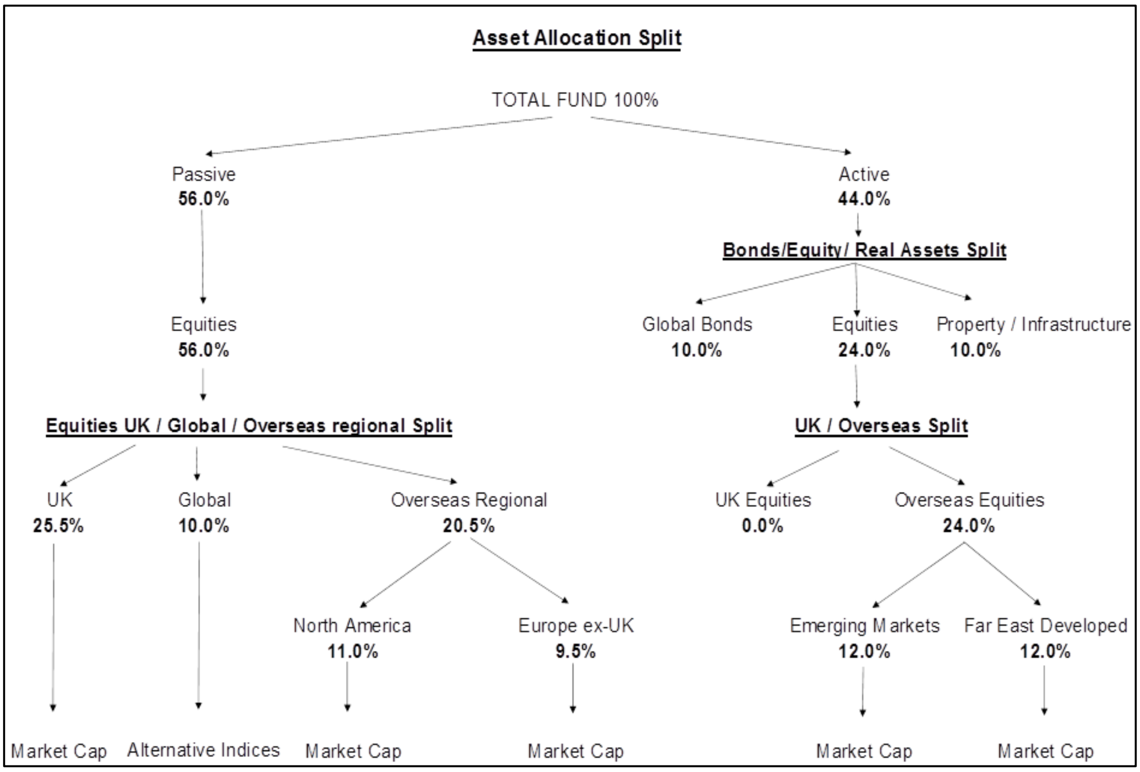
e) Infrastructure pooled funds

Infrastructure can be defined as the essential facilities and services upon which the economic productivity of society depends. These assets are typically involved in the movement of goods, people, water, and energy. Infrastructure returns can be accessed through listed Infrastructure, which is more correlated to Equity returns, unlisted

Infrastructure equity investments accessed through pooled funds and Infrastructure Debt, again usually accessed through pooled funds. Direct investment is also possible depending on available internal skill and resource.

5.7 Equities are primarily split on a regional geographic basis, with the exception of the alternative indices allocation in the passive equity portfolio, which is on a global basis. The current allocation is set out in the diagram below. Bond investments are in global corporate debt. All active equity indices are 'Market Cap' based, whilst the passive allocation is 'Market Cap' based for the developed regional equity investments and a mix of alternative indices for the global allocation.

Figure 1: Current allocation of assets


Asset Allocation Split
TOTAL FUND 100%
Passive
56.0%
Active
44.0%
Bonds/Equity/ Real Assets Split
Equities
56.0%
Global Bonds
10.0%
Equities
24.0%
Property / Infrastructure
10.0%
Equities UK / Global / Overseas regional Split
UK / Overseas Split
UK
25.5%
Global
10.0%
Overseas Regional
20.5%
UK Equities
0.0%
Overseas Equities
24.0%
North America
11.0%
Europe ex-UK
9.5%
Emerging Markets
12.0%
Far East Developed
12.0%
Market Cap
Alternative Indices
Market Cap
Market Cap
Market Cap
Market Cap

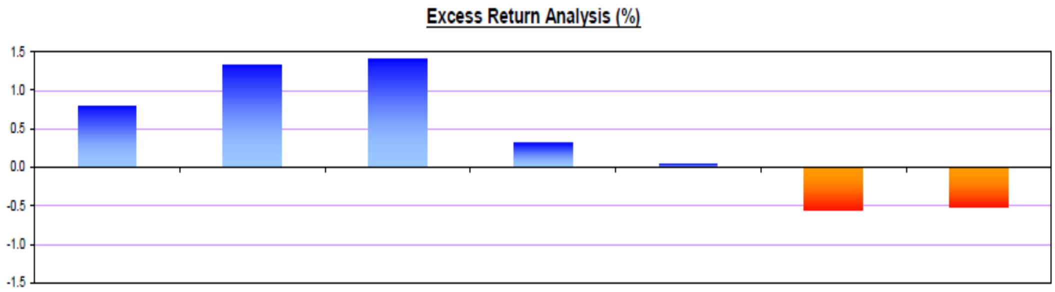
5.8 Over the past three years the Fund has started to diversify away from the traditional asset classes of equities and bonds, to help achieve a lower risk and volatility profile, alongside seeking additional sources of income and growth. This strategy is in-line with the actions taken by other LGPS Funds. At present the Fund has diversified into property and infrastructure pooled funds.

6 Taking Stock: Summary of Fund performance

Fund performance over 1, 3 and 10 years

6.1 The Fund's performance, as at 30th September 2016, can be analysed against the bespoke benchmark, which reflects the specific assets that the Fund invests in, or against a peer group of other Funds (usually specifically other LGPS Funds). A comparison will be made against other Funds later in this section. Therefore this will concentrate on performance against the Fund’s own benchmark.

Figure 2: Summary performance of total Fund against Fund benchmarks



	QTR	YTD	1 Yr	3 Yr	5 Yr	10Yr	Mar-87
Portfolio Return	8.3	15.8	24.9	10.1	12.0	6.5	8.0
Benchmark Return	7.5	14.4	23.5	9.8	11.9	7.0	8.6
🟦🟥 Excess Return	0.8	1.3	1.4	0.3	0.0	-0.6	-0.5

All returns for periods in excess of 1 year are annualised.

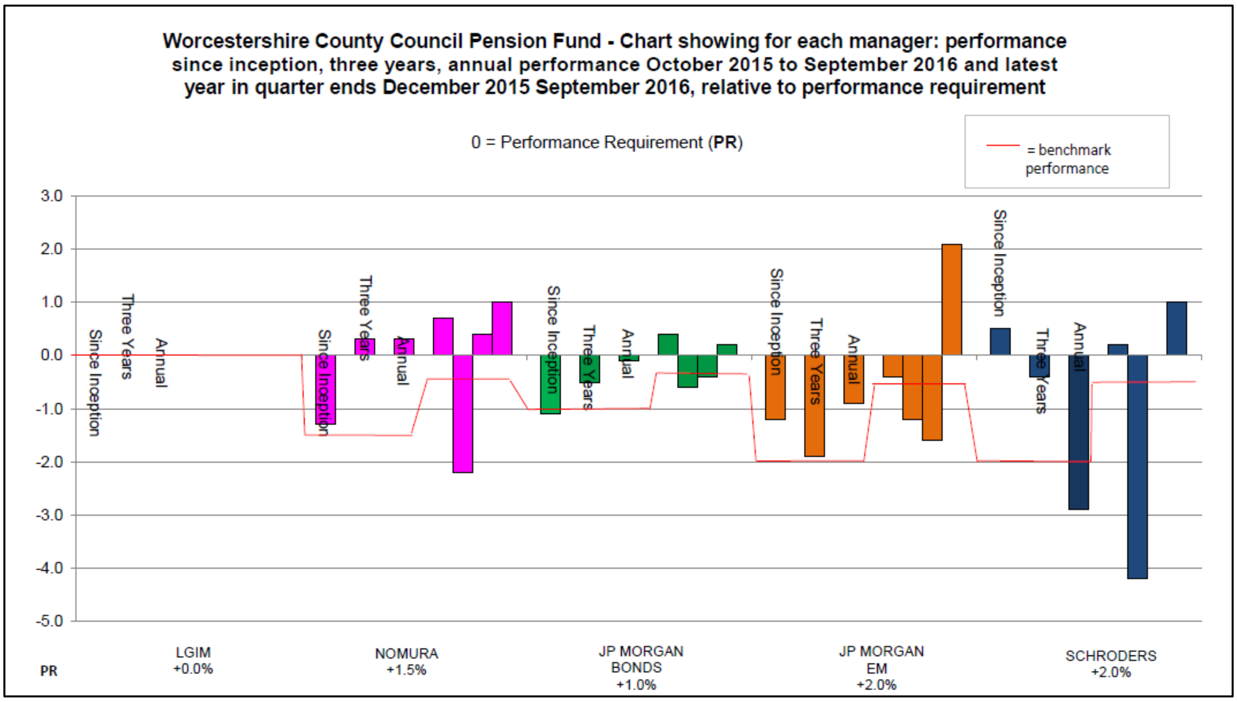
6.2 Over one year the Fund has outperformed the benchmark by 1.4%, over three years has outperformed by 0.3% per annum but has underperformed over the past ten years by 0.6% per annum.

6.3 The Fund's performance represents a minimal divergence from benchmark and can be explained by the high percentage of assets (56%) that are managed on a passive basis. The reversion to passive equity investment that has happened since the last triennial valuation and asset allocation review was made with the intention to reduce the risk of significant underperformance occurring on any timescale. It also recognises that it is increasingly hard for active managers to outperform general market movements in developed markets such North America. The underperformance illustrated above over the ten year period is directly attributable to the active managers employed at the time, one of which has been relieved of their mandate since 2013.

Investment managers performance

6.4 The performance by Fund Manager is illustrated in Figure 3 below.

Figure 3: Summary performance by Fund Manager



£1,308.0 million – Passively managed Equities

6.5 The passive equities mandate is managed by Legal and General Asset Management (LGIM). The mandate has been held by LGIM since December 2015 following the joint procurement by six Midlands based Funds, five of which are also members of the LGPS Central pool. The joint procurement exercise generated significant fee saving for the six Funds involved and has since been replicated by other LGPS Funds across the country. The mandate covers the UK, Europe ex-UK, North America and a global alternative indices allocation.

6.6 The passive equity mandate has performed in line with the benchmark, which is as expected. Therefore this section on manager performance will concentrate on the Bonds mandate, Active Equity mandates and the Property and Infrastructure investments.

£821.9 million – Actively managed Equities and Bonds

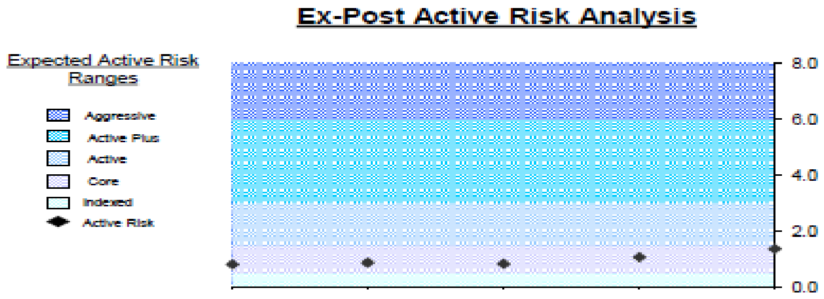
6.7 The Far East Developed Equities mandate managed by Nomura and the Bonds mandate managed by JP Morgan have been in place for just over ten years, whilst the Emerging Markets Equities mandates managed by JP Morgan and Schroders have been in place since 2011.

6.8 The Far East Developed Equities mandate and the Bonds mandate performed well for the first five years until the financial year 2007/08. Since 2008 the active elements have delivered relatively poor performance relative to target. JP Morgan have also struggled with performance on their Emerging Markets mandate, however Schroders have performed relatively well since inception. Over the past three years, in absolute annualised returns terms Emerging markets have delivered +8.4%, the Far East has provided +10.6% and the Bond mandate benchmark returned +5.8%.

6.9 Across the life of these mandates performance has been volatile, with many months showing negative returns, which has hampered achieving consistent performance. This volatility is illustrated in the individual manager sections shown in Figure 3 above.

6.10 The amount of risk taken by the active managers is shown in Figure 4 below, which shows how active management adds to total portfolio risk.

Figure 4: Ex Post Active Risk Analysis



	1Yr	3Yr	5Yr	10Yr	Mar-87
Active Risk	0.8	0.9	0.8	1.1	1.4
Portfolio Risk	8.1	8.8	9.3	13.2	13.0
Benchmark Risk	7.9	8.5	9.1	12.6	12.8

£379.8 million – Nomura Asset Management UK Limited – Japan and Developed Asia ex-Japan

6.11 Nomura have outperformed over the last 12 months by 1.4%, and over 3 years have also outperformed by 1.7% (per annum). Since inception Nomura have equalled their benchmark. Their outperformance target is 1.5% per annum over rolling three year periods above their benchmark, which is the FTSE Developed Asia Pacific Index.

6.12 Following the 2013 Asset Allocation Review Nomura's benchmark was changed from Japan and Asia ex-Japan to Japan and Developed Asia ex-Japan. This change removed the Emerging Markets economies from their benchmark. The Emerging Markets active Equities mandates are managed as two separate portfolios by Schroder and JP Morgan. The inception of these portfolios dates back to October 2011 and December 2011 respectively.

6.13 Nomura's performance profile has followed the general trend, performing well initially, less so following the 2007/08 financial crisis but has recovered somewhat recently. The difference is that having suffered the same dip in returns experienced elsewhere in the financial year 20070/8, returns recovered back into positive territory until 2011, before tailing off again through to 2013.

6.14 The recent improvement in performance follows the change in benchmark and a fee discount negotiated on the Developed Asia ex-Japan segment of the portfolio. This tiered discount remains in place until performance target is achieved on a rolling three year time horizon.

6.15 This remains a diverse mandate, covering a lot of territory, which brings considerable challenges in making sure money is actually invested in the right markets at the right time. Since 2013 and until the second quarter of 2016 Nomura had "given up" on trying to make active returns in Australia and moved that element of their portfolio onto a passively managed basis.

6.16 In broad terms the Japanese element of the mandate has performed better than the rest of the region. Although Nomura have implemented a new portfolio manager to manage the non-Japanese element of the mandate and performance has been on an upward trend since his appointment.

£146.1 million – JP Morgan Asset Management – Emerging Markets

6.17 JP Morgan has outperformed over the last 12 months by 0.9% and since inception (12/12/2011) outperformed their benchmark by 0.2% per annum. Their outperformance target is 2.0% per annum over rolling three year periods above their benchmark, which is the FTSE All World Emerging Markets Index.

6.18 JP Morgan is a long way behind their performance target. JP Morgan seeks to achieve superior risk-adjusted returns over the long term by using diversified sources of alpha whilst maintaining a value bias.

6.19 The underperformance achieved over the past three years (0.3% behind benchmark) is largely attributable to 2014, which was according to JP Morgan, the worst year for Value style investing in the past twenty years. 2015 was not as bad for JP Morgan's Value-orientated style of investing, but it was apparently not a good environment. JP Morgan state that it has been frustrating to underperform in early 2016 because the cyclical rally they expected did materialise, but the portfolio didn't benefit. JP Morgan's move to increase Russia late in 2015 worked but they missed the large rally in Brazil. However, relative performance for the quarter ended September is substantially above benchmark at +2.5%. Further analysis of JP Morgan style bias is shown in Section 12 of this paper.

£159.3 million – Schroder Investment Management Limited – Emerging Markets

6.20 Schroders have underperformed over 12 months by 1.5% but have outperformed since inception (20/10/2011) by 2.2% per annum. Their outperformance target is 2.0% per annum over rolling three year periods above their benchmark, which is the FTSE All World Emerging Markets Index.

6.21 As the performance numbers show, Schroders are currently the leading Emerging Markets manager for the Fund. They have also shown a better level of consistency in their performance.

6.22 Schroders have provided some exposure to Frontier Markets, thus extending the geographical spread for the Fund.

£136.7 million - JP Morgan Asset Management - Bonds

6.23 JP Morgan have outperformed their benchmark over the past 12 months by 0.8% and have outperformed over the last 3 years per annum by 0.4%. Since inception (31/3/03) they are behind benchmark by -0.3% per annum. Their outperformance target is 1.0% per annum over rolling three year periods above their benchmark, which is the Barclays Global Aggregate Corporate Bond Index.

6.24 This mandate has been subject to two restructures since inception. The first change was made in 2009 and the most recent change was in 2012, when a major switch from Government bonds into Corporate bonds was undertaken, reflecting the valuation differential between the two sectors.

6.25 Since inception the cumulative return has been disappointing. In more detail, initial returns were positive, but then tailed off sharply in late 2007/2008. Subsequently there has been a gradual improvement, particularly following the changes made to the mandate in 2009 and 2012.

6.26 Concerns exist that JP Morgan have not utilised their risk budget effectively in order to achieve their performance target and that the portfolio manager responsible for the mandate has recently been changed.

6.27 Fund Officers obtained external benchmarking information on performance achieved by JP Morgan's peers and also market fees for similar mandates. The research showed that JP Morgan had performed at the bottom of the second quartile and top of the third quartile of equivalent managers over the past three years. The 1% performance target has therefore been achieved by the top performing managers.

6.28 Following a proposal by JP Morgan to reduce their performance target as it was deemed unachievable in the current market environment, combined with a fee reduction offer, on 16 September 2016 Fund Officers met with JP Morgan to discuss their proposal.

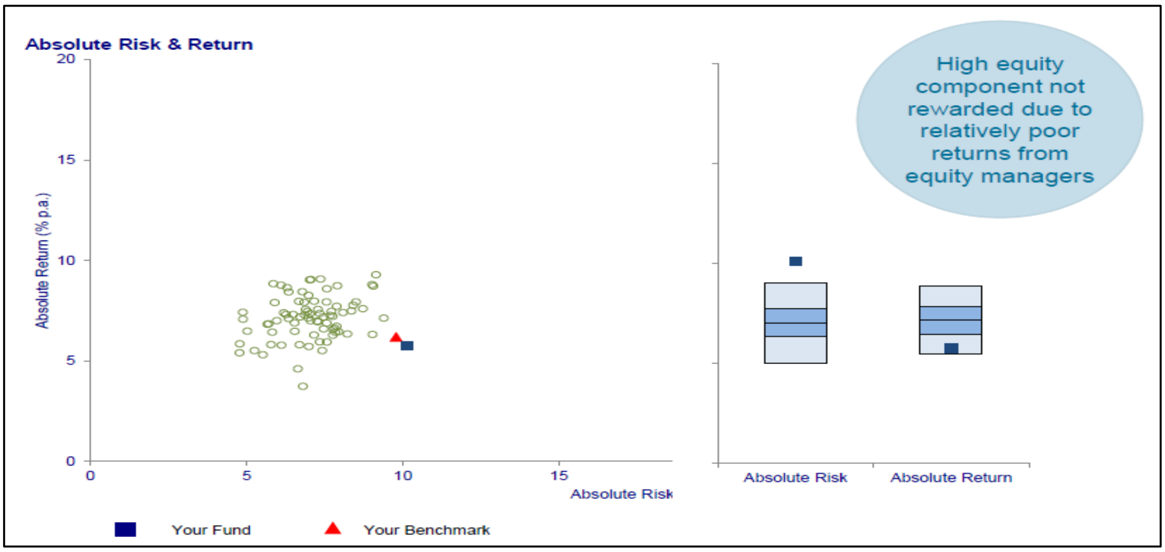
6.29 The Chief Financial Officer informed JP Morgan that the contracted target performance requirement of +1% would remain, as top performing managers had achieved this target and there would be a procurement issue if the target were changed at this stage. JP Morgan stated that the portfolio's target performance is an outlier for them when compared to other clients but accepted the procurement issue of changing the contracted target. Following further discussions, JP Morgan agreed to further revise their fee proposal and subsequently this was accepted.

Comparisons with the absolute risk and return of other LGPS Funds

6.30 The chart below provides the range of absolute risk and returns seen across the WM LGPS universe for the five years to 31st March 2016. This illustrates how wide the range of returns and risk positions are, and also the high risk position taken by the Fund over this time period.

6.31 The high level of absolute risk is driven by the Fund's significant overweight to Equities compared to the average LGPS fund. Equities in comparison to other asset classes such as Bonds have not demonstrated such a differential in return that has been the experience over the last 30 years. This is due, in the main to the impact of Quantitative Easing on Bond Valuations since 2010. Over the medium term, Equities are still anticipated to be an Growth Asset Class where the risk and volatility of this Asset Class should be rewarded through additional yield and capital appreciation.

Figure 5



7 Review of the Fund's Strategic Asset Allocation Conditional Value at Risk

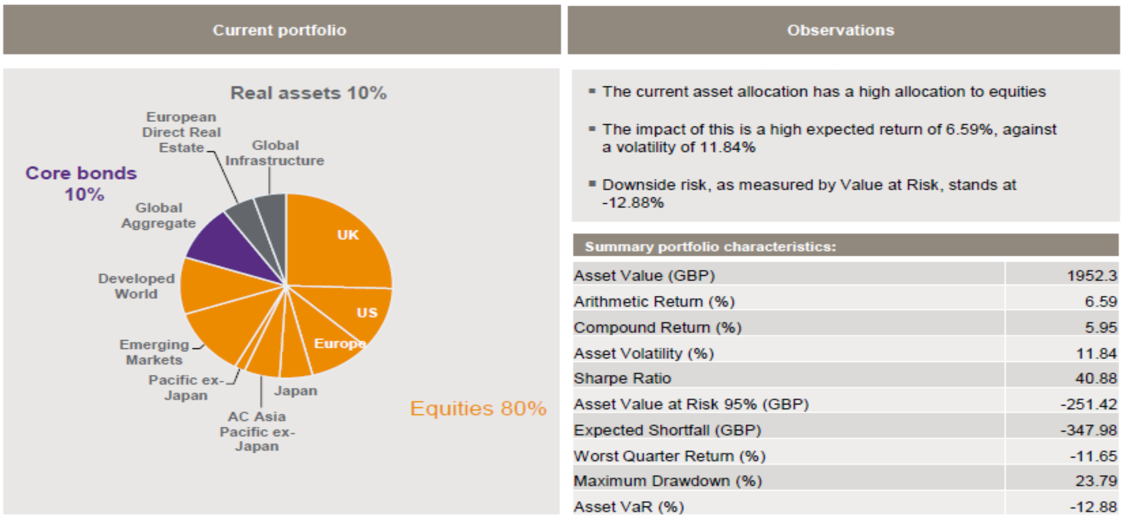
Risk analysis

7.1 The table below details the 6.59% expected return from the Fund's current strategic asset allocation based on JP Morgan's Long-term capital markets assumptions 2017. Expected asset volatility is 11.84% mainly driven by the high allocation to equities. Down side risk, also known as Asset Value at Risk gives the average portfolio return in the worst 5% of scenarios. The result of -12.88% is relatively high compared to the average LGPS Scheme due to the Funds significantly higher than average allocation to 'Market Cap' benchmarked equities, which on average have a higher volatility over the long term than Bonds, Property and a number of other types of 'alternatives'. High correlation between asset classes and Equity indices within the portfolio also increases the Asset Value at Risk.

7.2 Please note that this analysis is based on benchmark risk and does not take into account risk introduced by active managers. Therefore in reality the Fund's Asset Value at Risk is slightly higher than -12.88%.

7.3 This analysis supports the moves made as a result of the last Strategic Asset Allocation into other Asset Classes and Index trackers that are based on alternative characteristics of companies than Market Capitalisation.

Figure 6



Current portfolio

Observations

- The current asset allocation has a high allocation to equities
- The impact of this is a high expected return of 6.59%, against a volatility of 11.84%
- Downside risk, as measured by Value at Risk, stands at -12.88%

Summary portfolio characteristics:	
Asset Value (GBP)	1952.3
Arithmetic Return (%)	6.59
Compound Return (%)	5.95
Asset Volatility (%)	11.84
Sharpe Ratio	40.88
Asset Value at Risk 95% (GBP)	-251.42
Expected Shortfall (GBP)	-347.98
Worst Quarter Return (%)	-11.65
Maximum Drawdown (%)	23.79
Asset VaR (%)	-12.88

8 The existing Strategic Asset Allocation compared against the WM Local Authority Universe

8.1 The 2015/16 annual WM report provides data that analyses the contribution to performance, positive and negative, at:

- the asset allocation level; and also
- the effectiveness of stock selection by asset class and geography.

8.2 It is worth bearing in mind that this information reveals the impact of non-ownership of asset classes as much as it does for the classes that are represented within the Fund.

8.3 The outcome as at 31st March 2016 is summarised in Table 4 below.

Table 4 Summary of effectiveness of the current asset allocation

Outperformance per annum	Asset Allocation	Stock Selection
Over 1 Year	-2.0%	-0.1%
Over 3 Years	-0.1%	-1.1%
Over 10 years	0.4%	-1.0%

8.4 The table shows that active managers over the short, medium and long term have been a detractor to Fund returns compared to LGPS average through their active stock selection decisions, even though in some cases they have outperformed their own indices. The Fund's active managers' performance has improved since the last Strategic Asset Allocation review in 2013.

8.5 The Fund's asset allocation compared to the average LGPS Fund has been a positive factor over the long run but has detracted slightly over the medium term and has been poor over the past year. This is largely due to the Fund's underweight allocation in Bonds, at a time when Bond yields have fallen to record lows, and also due to the overweight position in Emerging Markets and Far East Equities. The returns of which have been negatively impacted by the strong U.S. Dollar. Bond yields now appear to be on the turn and the U.S. Dollar bull-run is running out of steam including recent falls following the U.S election result. The Fund's exposure to Emerging Markets and Far East Equities is for the Long Term and it is anticipated that returns will revert to long term average over the longer term.

9 Market returns achieved across different asset classes

9.1 Table 5 below details market returns to 31 March 2016 across Equity markets, Bond Markets and other Alternatives, including Property. The purpose of this table is to demonstrate how asset allocation decisions can outweigh the relative returns achieved by the Fund's active managers.

Table 5 Summary of effectiveness of the current asset allocation by geography

Outperformance by Region	One Year	Three Years	Ten Years
UK Equities	-3.9%	3.7%	4.7%
North America Equities	3.6%	12.6%	8.8%
Europe ex-UK Equities	-4.2%	6.5%	4.9%
Japan Equities	-3.3%	6.6%	1.7%
Pacific Equities	-5.4%	0.1%	7.6%
Other International Equities (Emerging Markets)	0.4%	9.0%	7.0%
UK Bonds	3.2%	4.6%	5.7%
Overseas Bonds	9.8%	2.6%	6.5%
UK Index Linked Bonds	1.7%	5.1%	7.4%
Cash/Alternatives	0.3%	0.3%	1.7%
Property	11.7%	14.6%	5.0

10 A review of Active Equities Management Structures

Global Based Mandates

10.1 These mandates are popular as asset managers strive to concentrate their attentions on markets with the best prospects, wherever they are, developed, emerging or even frontier. However the scale of operations needed to support a global investment manager usually means that their focus tends to be on larger, more tradable company names, meaning that there are plenty of opportunities for regional specialists to identify smaller, less well-known companies with good long term prospects for their investors.

10.2 Out of the main developed market areas (USA, Europe and Far East); in the medium term Emerging Markets and the Far East probably have the best potential upside. Good unconstrained global managers can respond to the fundamentals for each market accordingly.

Far East and Emerging Markets

10.3 It is important to focus on the relative attractions of the various parts of the region to ensure that the Fund has exposure to the most attractive areas. The current mandate with Nomura is focused purely on Japan and Developed Asia ex-Japan. This increased mandate concentration and change in portfolio manager in the ex-Japan element of the portfolio has allowed Nomura to focus their analysis and to start to achieve some positive returns against benchmark.

10.4 The fee discount for the Developed Asia ex-Japan element of the portfolio remains in place until target returns are achieved over a rolling three year period. The Japanese element has also been performing well recently. The region still has great potential for investors, but the Fund needs to ensure the correct expertise is contracted to exploit available opportunities.

10.5 Emerging Markets have been cast into the shadows by the performance of developed markets in over 2013, 2014 and 2015. They have shown some significant signs of recovery in 2016. The long term investment case for Emerging Markets remains intact. Active managers can make good returns by ensuring that they do invest in the markets with the best prospects.

North America

10.6 The rise of the U.S. shale gas industry has had a significant impact on global energy prices and has forced OPEC to increase oil supply to lower the oil price and undercut shale gas providers to try and force them out of business. This has had limited effect and has led to a sustained low oil price. The side effect has been considerably positive for the United States (U.S.) economy. Lower cost of production has made industry more cost competitive.

10.7 The U.S stock market has performed strongly in local currency terms and in GBP but further substantial market increases look less likely and over the long-run JP Morgan expect the U.S. Dollar to depreciate against Sterling.

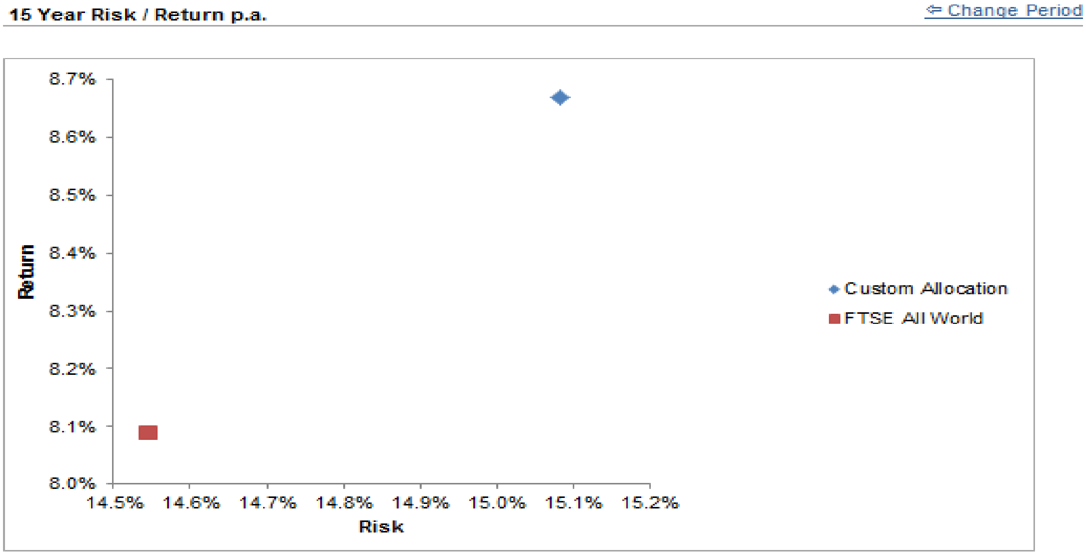
Europe

10.8 Following years of sub-par growth it is, at present, difficult to see what course of events will trigger a substantial and sustainable recovery in most of the Eurozone, given the sheer scale of sovereign debt and potential banking issues. Active investors in Europe will be in for a bumpy ride, especially following the decision of the United Kingdom to exit the European Union. The divorce process is likely to be challenging and further volatility in the currency markets is expected.

Performance Analysis

10.9 Figure 7 below provided by Legal and General Asset Management shows the Fund's current regional market cap equity allocation versus a global index (FTSE All World) performance over the past fifteen years. The analysis shows that over the fifteen years the regional allocation has outperformed global by 0.6% per annum at a slight increase in risk / volatility of 0.6%

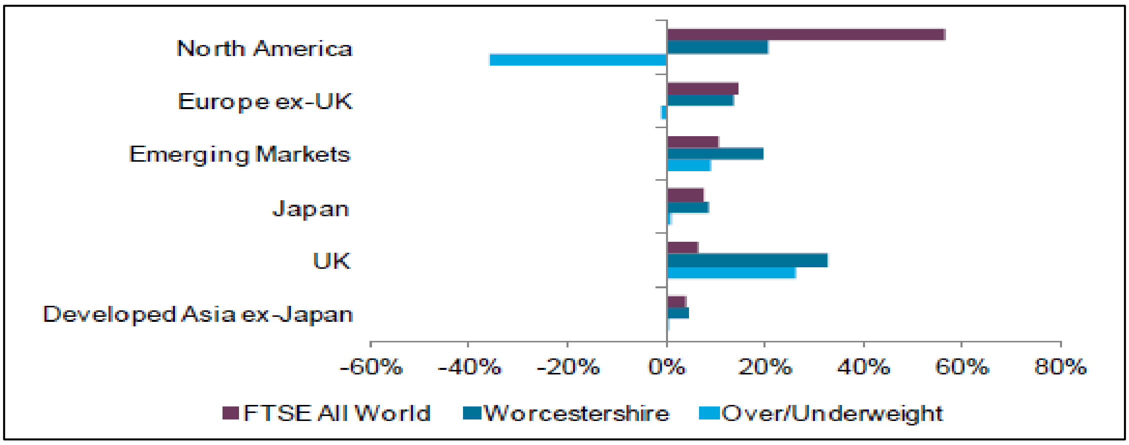
Figure 7



Regional weights compared to global index

10.10 Figure 8 below sets out the Fund's equity exposure via regional portfolios relative to the FTSE All-World Index.

Figure 8



10.11 Compared to the FTSE All-World Index the Fund has a significant underweight to North America, a significant overweight to the UK and a moderate overweight allocation to the Emerging Markets. Over the long term the process of determining regional weights is likely to be a major driver of the Fund's equity allocations performance. Table 6 below shows the performance of the three regions to which the Fund had material deviations relative to the global standard benchmark over one year, three years and five years to September 2016.

Table 6

Region	Index	1 Year	3 Years (p.a.)	5 Years (p.a.)
North America	S&P 500 (USD)	15.4	11.2	16.4
UK	FTSE 100 (GBP)	18.3	6.0	10.1
Emerging Markets	FTSE Emerging (USD)	17.2	0.7	3.5
Global	FTSE All World (USD)	12.6	5.8	11.3

10.12 Over the past five years North America has performed very strongly compared to the UK and significantly better than Emerging Markets. Therefore over this shorter time horizon allocating to equities on a global basis would have been optimal for the Fund.

10.13 Performance of regional vs. global allocations will fluctuation over time but investing via a series of regional weightings does offer the Fund better opportunities to fully tailor regional weights and provides the option of dynamic asset allocation by the Pension Committee. This option may become increasingly utilised once assets have transferred to the pool and the Pension Committee has more time and resource at its disposal to concentrate on strategic asset allocation decisions.

10.14 Table 7 below provided by BFinance sets out the benefits of a regional and global approach to equities asset allocation.

Table 7

Regional Equity Portfolios	Global Equity Portfolios
- Easy to fully express customised regional tilts;	- Delegation of regional tilts to managers;
- May benefit from specialist regional managers;	- Managers have full flexibility of global stock universe.
- Domestic allocation tax/local knowledge benefits;	- Global managers now have meaningful track records;
- Appropriate resourcing required for implementation.	- Easy implementation of global equity exposure.

Conclusion

10.15 There is no clear case to move from regional allocation of equities to global at this time.

10.16 Over the past 15 years, following the change from global to regional allocation of equities in 2001/02, the regional allocation has outperformed global by 0.6% per annum for a small increase in risk (0.6%). Analysis of shorter time periods shows different results but a change to global allocation at present would increase the Fund's weight to U.S. equities at a time when U.S rates are likely to rise and the U.S equities market, after a very strong period, appears to be levelling off.

10.17 Global exposure is also gained through the Fund's passive alternative indices allocation, so in reality the Fund employs a mixed approach to equities asset allocation.

10.18 It is recommended that a review of regional equity weightings be carried out before assets are transferred to LGPS Central pool. Once transitioned to the pool, review of regional equity weightings is recommended to form part of a more dynamic approach to asset allocation undertaken by the Pension Committee.

11 Review of Equities Management in North America

Investment theory

11.1 Investment theory and empirical evidence suggests that net of fees the average active equity manager will underperform their benchmark, especially in highly efficient developed markets. There is little evidence to support a view that the U.S. market is more efficient than other developed equity markets. Tables 8 and 9 below show the calendar year outperformance of active U.S. equity managers and the rolling three year annualised outperformance of active U.S. equity managers.

Table 8 Calendar year outperformance of active U.S. equity managers

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Managers	1142	1123	1099	1054	1022	988	958	930	889	850
Median Outperformance vs Index	-1.46	-1.85	10.7	-0.84	-1.63	-0.55	2.15	0.43	1.84	-0.66
Top Quartile Outperformance vs Index	1.71	0.14	3.97	1.46	1.58	2.17	9.45	4.06	7.34	2.45
% Outperforming Index	**38%**	**27%**	**58%**	**41%**	**34%**	**44%**	**58%**	**54%**	**61%**	**45%**

Source: eVestment, U.S. Large Cap Equity universe.
All manager returns are net of a 0.50% annual management fee. All managers are compared against the S&P 500 index

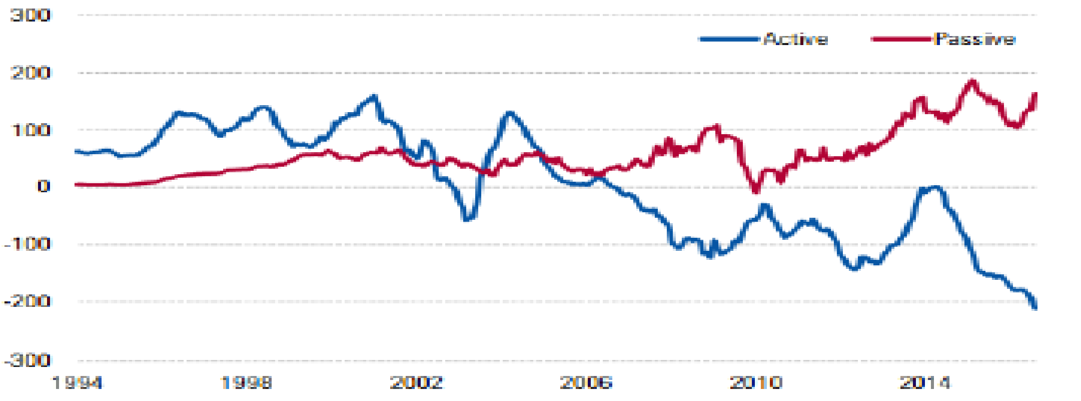
Table 9 Rolling three year annualised outperformance of active U.S. equity managers

	July'13-June'16	July'12-June'15	July'11-June'14	July'10-June'13	July'09-June'12	July'08-June'11	July'07-June'10	July'06-June'09
Managers	1018	1005	980	960	933	905	870	828
Median Outperformance vs. Index (P.A.)	-1.41	0.16	-0.73	-0.72	-1.07	0.63	1.60	1.69
Top Quartile Outperformance vs. Index (P.A.)	0.16	1.87	0.46	0.47	0.44	2.22	3.55	3.56
% Outperforming Index	**28%**	**53%**	**34%**	**35%**	**31%**	**61%**	**70%**	**70%**

Source: eVestment, U.S. Large Cap Equity universe.
All manager returns are net of a 0.50% annual management fee. All managers are compared against the S&P 500 index

11.2 The tables show that U.S. equity managers' performance against benchmark net of fees since 2010 has been poor with the exception of 2013 when 58% of managers outperformed the index. One possible reason for the fall in performance is the impact of the flows of investments from actively managed strategies to passively managed strategies in the U.S. Active managers who invest based on fundamentals would have faced headwinds as passive funds will flow towards all stocks in the index without taking into account their fundamentals. Figure 10 below, provided by BFinance, shows the U.S equity twelve month flows (USD billion).

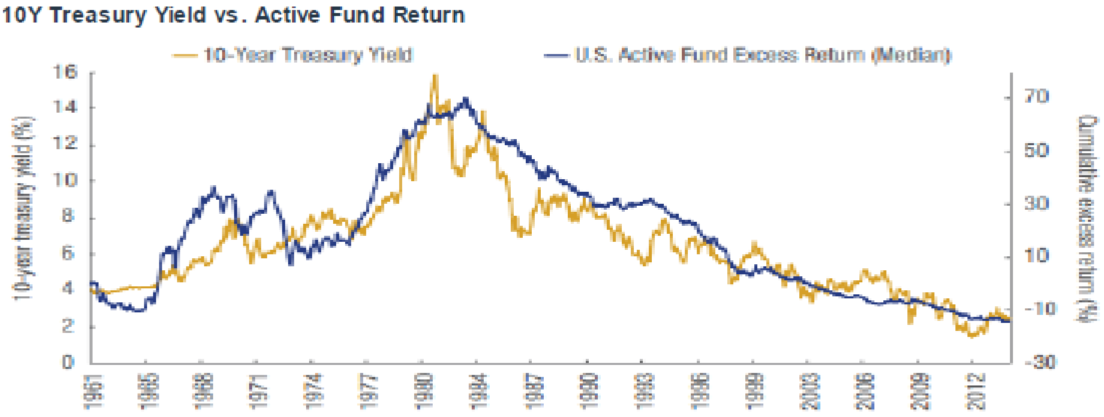
Figure 9



Source: Morningstar Direct Asset Flows.

11.3 There is also evidence to suggest that there is a link between U.S. treasury yields and the performance of U.S. active equity managers. Figure 10 below shows that active managers tend to add greater levels of outperformance in rising interest rate environments.

Figure 10



Source: CRSP, S&P, Russell, Nomura Research.

Independent Performance Analysis

11.4 Table 10 below sets out the findings of an independent report from SPIVA (S&P Indices versus Active - based on S&P Dow Jones Indices' analysis), which shows research into the active / passive manager performance in North American equities.

Table 10 SPIVA H1 2016: Percent of Time Indices Outperformed Active Managers

Fund category	1 year	3 years	5 years	10 years
All Domestic US Equity Funds	90.20%	87.41%	94.58%	87.47%
Global Equity Funds	75.35%	76.96%	82.45%	81.19%
Emerging Market Equity Funds	42.22%	77.42%	67.63%	81.94%

11.5 There is no conclusive evidence that over the short or medium term active U.S equity managers on average can outperform their index net of fees. There will be managers in the market than can and have outperformed the index over the long term but manager selection risk is high. It is therefore recommended that the Fund remains passive in North America.

Conclusion

11.6 During 2016, the Fund moved its Actively Managed Fund in North America into Passive management due to on-going performance issues with the Active Manager.

11.7 There is no clear evidence that the Fund will be able to pick an active manager that will outperform the index in North America and on average the majority of managers over recent periods including the last ten years, after fees, have underperformed the index.

11.8 The flow of investments from active to passive strategies may have been a headwind for active managers over recent years and for that reasoning is not deemed sufficient evidence on which a retain active management in North America.

11.9 It is recommended therefore that the Strategic Asset Allocation to Actively Managed North American Equities is changed to Passively Managed North American Equities.

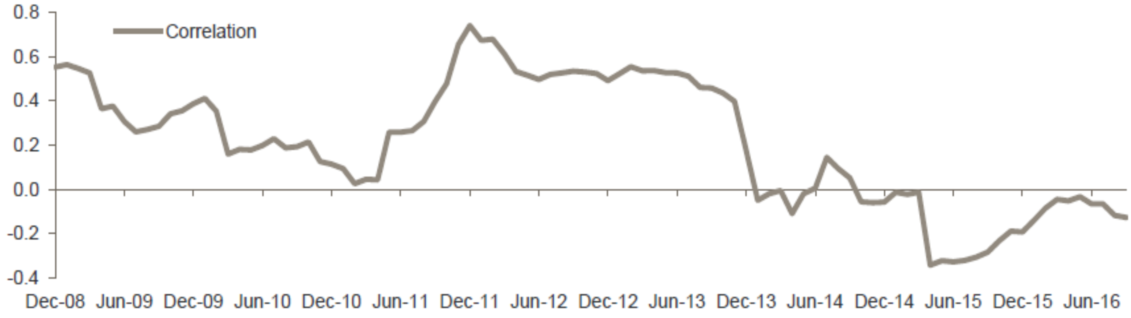
Review of active Emerging Markets managers' investment style blend Manager Style Correlation

11.10 Research provided by JP Morgan shows clear advantages of combining managers with different style exposures in Emerging Market equities. Figure 11 below shows the three year correlation of a basket of Value style managers and a basket of Growth style managers, as defined by Morningstar.

11.11 A negative correlation implies the two styles provide a good compliment. Correlation has been positive in the past but JP Morgan expect it to remain low going forwards and will therefore provide diversification benefits to the overall Fund portfolio.

Figure 11

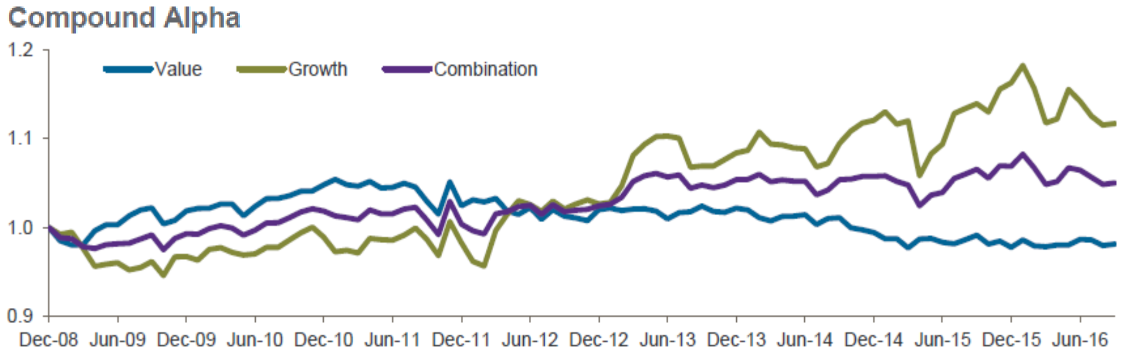
Three year correlation of Value & Growth managers



Source: Morningstar. JPMorgan Asset Management. Data as at 30th September 2016.

11.12 Figure 12 below shows how different manager styles have performed in market environments since December 2008. The combined approach has reduced volatility from its Emerging Markets equities exposure over the past eight years.

Figure 12



Source: Morningstar. JPMorgan Asset Management. Data as at 30th September 2016. Past performance is not necessarily a reliable indicator for current and future performance.

JP Morgan and Schroders style diversification

11.13 BFinance have provided a regression analysis indicating that both JP Morgan's GEM Diversified strategy, with its value and momentum style factors, and Schroder's GEM Equity Core strategy, which is more of a growth style, have displayed a growth bias since the beginning of 2010, albeit JP Morgan to a lesser extent. Therefore this initial analysis would not suggest that they offer the best complementary aspects to each other. Further analysis is required to determine whether JP Morgan's growth style bias has been in the main driven by benchmark movements and then offset by their active portfolio decisions or whether their active management of the portfolio has not been in line with their value and momentum strategy style.

11.14 The strategies do however have a reasonably low correlation of relative returns; 0.41 over the last three years and 0.34 over the last five years, which means there are risk reducing benefits of combining the two strategies.

Conclusion

11.15 The analysis provided by JP Morgan suggests that using a value and a growth style combined manager approach to investing in Emerging Markets active equities adds diversification and reduces risk, whilst maintaining returns.

11.16 It is recommended that the Pension Investment Advisory Panel is tasked with overseeing further due diligence to be carried out on JP Morgan to understand why the Emerging Markets portfolio has resulted in a slight growth style bias since 2010 and has therefore not provided the optimal diversification from the manager style blend.

Review of the passive equities alternative indices blend Passive equities investment strategies

11.17 Passive investment removes active manager risk, but the investor is still exposed to the full impact of market volatility, which can have a profound impact on Fund values when markets fall sharply. The Fund currently gains exposure to passive equities through the following two different types of indices:

a) Regional Market capitalisation weighted Indices

A capitalisation-weighted index is a type of market index with individual components that are weighted according to their total market capitalisation. The larger components carry higher percentage weightings, while the smaller components in the index have lower weights.

b) Global Alternative Indices

A set of investment strategies that emphasise the use of alternative index construction rules to traditional market capitalisation based indices. Alternative indices emphasise capturing investment factors or market inefficiencies in a rules-based and transparent way. The aim is to remove some of the market driven volatility from the measurement process.

Alternative indices performance vs market capitalisation indices

11.18 Legal and General have run the performance as per Table 11 below for the last five years, to give an indication of how the alternative indices strategies have performed both individually, as a blend, and against the world market capitalisation indices (GBP unhedged).

Table 11 Performance table to 30th September 2016

	FTSE RAFI Developed 1000	MSCI World Min Vol (GBP Optimised)	MSCI World Quality	WCC Smart Beta Blend	FTSE World Developed
Annualised Return	15.19%	16.01%	18.01%	16.55%	16.32%
Annualised Volatility	10.30%	10.10%	10.01%	9.29%	9.85%
Return/Risk	1.47	1.59	1.80	1.78	1.66

11.19 The Alternative Indices blend (30% RAFI / 35% Min Volatility / 35% Quality) is effectively the current weighting of the holdings within the Legal and General Pooled Fund, which equates to the original blend managed by UBS Asset Management. The current blend has an underweight to Value style. Key points from table 8 are detailed below:

- The table shows that the Alternative Indices blend has slightly outperformed FTSE World whilst also reducing volatility;
- The Alternative Indices blend has had a lower volatility than any of the other strategies; and
- The Minimum Volatility strategy does not have the lowest volatility over this period. Currency effects have been strong, particularly within the last year, and Legal and General believe this has in part driven this result.

11.20 The alternative indices blend has provided additional diversification as intended at the point of implementation and due to market environment has provided additional return since 2013.

Conclusion

11.21 The passive alternative indices have added additional returns and reduced volatility compared to market capitalisation indices. The blend is underweight to Value but that was the intention at the time of implementation due to the Fund's allocations to Value style active managers.

11.22 It is recommended to increase the Fund's allocation to alternative indices by 5% of the Fund's equities allocation.

11.23 Further analysis is recommended to be carried out by Fund officers with the support of Legal and General Asset Management to consider the removal of the underweight to Value style in the blend based on:

- the termination of Capital International, a Value style active manager; and

- the understanding that Value has underperformed Growth for a few years and appears to be on the turn, according to the JP Morgan Emerging Markets portfolio manager.

12 Review of the Bond portfolio benchmark

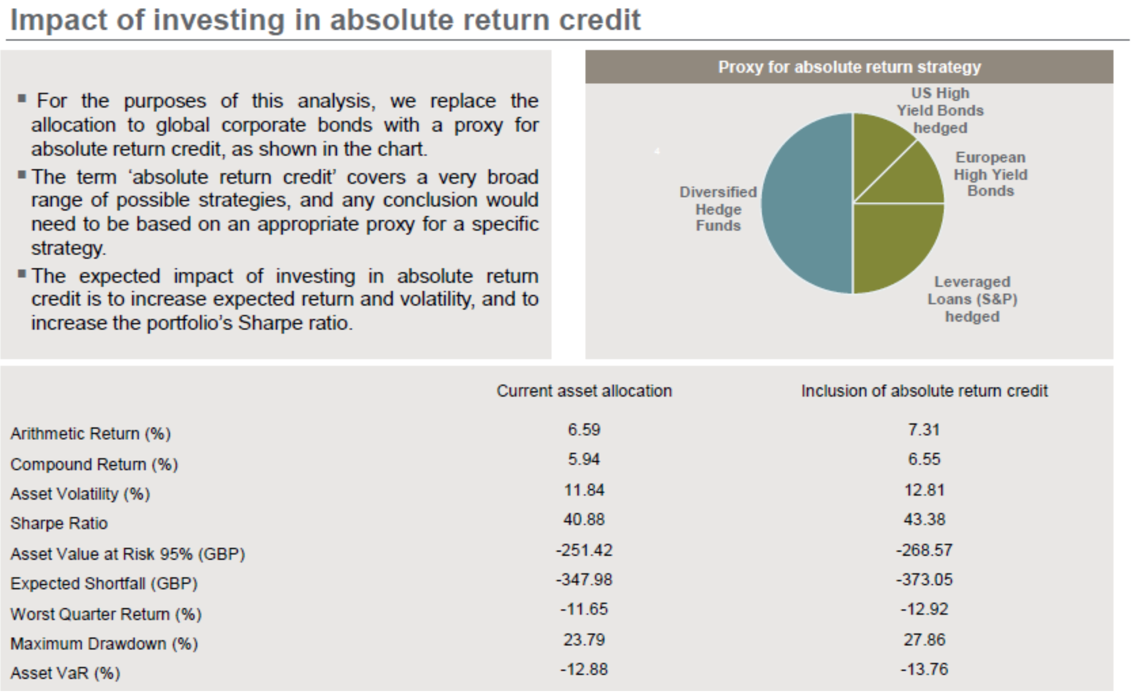
Absolute Return Credit strategy definition

12.1 Absolute return credit strategies allocate tactically across credit asset classes. Most commonly investment grade credit, high yield Bonds, Emerging Market debt, depending on the perceived relative value. These strategies will often use a LIBOR+ benchmark.

12.2 Return and risk analysis of implementing an Absolute Return Credit strategy

12.3 Figure 13 below provided by JP Morgan shows the risk / volatility and potential return of investing in an Absolute Return Credit strategy as opposed to the current global corporate bonds strategy.

Figure 13



Impact of investing in absolute return credit

- For the purposes of this analysis, we replace the allocation to global corporate bonds with a proxy for absolute return credit, as shown in the chart.
- The term 'absolute return credit' covers a very broad range of possible strategies, and any conclusion would need to be based on an appropriate proxy for a specific strategy.
- The expected impact of investing in absolute return credit is to increase expected return and volatility, and to increase the portfolio's Sharpe ratio.

Proxy for absolute return strategy

US High Yield Bonds hedged
European High Yield Bonds
Leveraged Loans (S&P) hedged
Diversified Hedge Funds

	Current asset allocation	Inclusion of absolute return credit
Arithmetic Return (%)	6.59	7.31
Compound Return (%)	5.94	6.55
Asset Volatility (%)	11.84	12.81
Sharpe Ratio	40.88	43.38
Asset Value at Risk 95% (GBP)	-251.42	-268.57
Expected Shortfall (GBP)	-347.98	-373.05
Worst Quarter Return (%)	-11.65	-12.92
Maximum Drawdown (%)	23.79	27.86
Asset VaR (%)	-12.88	-13.76

12.4 The Absolute Return Credit strategy potentially increases portfolio returns from 6.59% to 7.31% but also increases volatility 11.84% to 12.81%. The downside risk would also increase from -12.88% to -13.76%. Please note that these results are gross of management fees and Absolute Return Credit strategies tend to demand higher fees than a standard global corporate Bond fund.

Government Bonds

12.5 As a result of Central Banks' Quantitative Easing (QE) programmes and very low, even negative interest rates, government bonds have become expensive with low yields and correlated to Equities. Government Bond prices are likely to come under pressure as QE is wound up, and rates start edging up to more acceptable / normalised levels. The capital value of the Government Bonds in the secondary market will fall as rates rise. Once that "normalisation" has taken place, the correlation to equities may well uncouple. In the meantime traditional Government Bonds are not serving their purpose as a diversifier to Equities.

Investment strategy

12.6 As detailed in Figure 5 the Fund is currently an outlier in terms of portfolio risk compared to LGPS average and therefore it is recommended to maintain the current global corporate Bonds strategy (hedged to GBP) as opposed to investment in an absolute return strategy. Maintaining a nil investment to Government Bonds in the short to medium term is also logical given the current market environment.

Conclusion

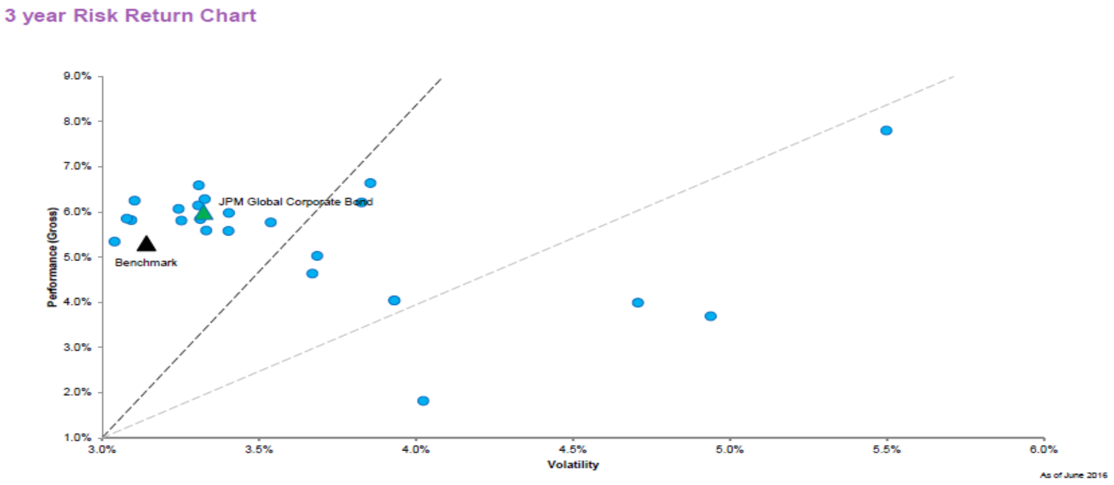
12.7 Due to the increased volatility and fees associated with absolute return credit strategies and the high price / low yields of Government Bonds it is recommended to maintain the Funds current global corporate bonds strategy. It is further recommended that the Bonds investment strategy is reviewed before transitioning assets into LGPS Central pool.

Active fund managers peer performance comparison JP Morgan - Bonds

12.8 The strategy has outperformed its peer group in the last three years, however only modestly by 0.20% relative to the median of the peer group. The strategy sits in the second and third quartiles over the different trailing periods in the last three years. Risk utilisation has been higher than the index, however on a risk adjusted basis has been lower than some of the top managers.

12.9 Figure 14 below shows JP Morgan's performance and volatility over the past three years to 30 June 2016 compared to their peer group.

Figure 14

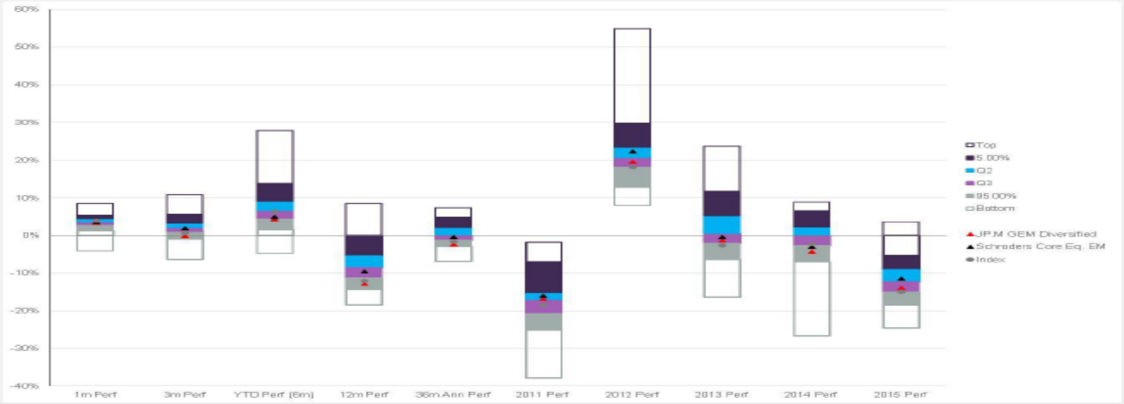


12.10 The Pension Committee on 26th September 2016 agreed a further discount proposal with JP Morgan, which reduced the basis point fee to 16.8bps, which equates to a £75,000 per annum fee reduction compared to the fee agreement in place between January 2016 and September 2016 and a £118,500 reduction compared to that paid prior to 1st January 2016.

JP Morgan and Schroders - Emerging Markets equities

12.11 BFinance have provided analysis of both JP Morgan's performance and Schroder's performance relative to peers over various periods over the past three years. Figure 15 below shows where each strategy on an MSCI EM index and not FTSE as per the Fund's bespoke benchmark falls in terms of quartiles relative to peers. Due to the index difference there will be a slight variance compared the Fund's portfolio returns.

Figure 15

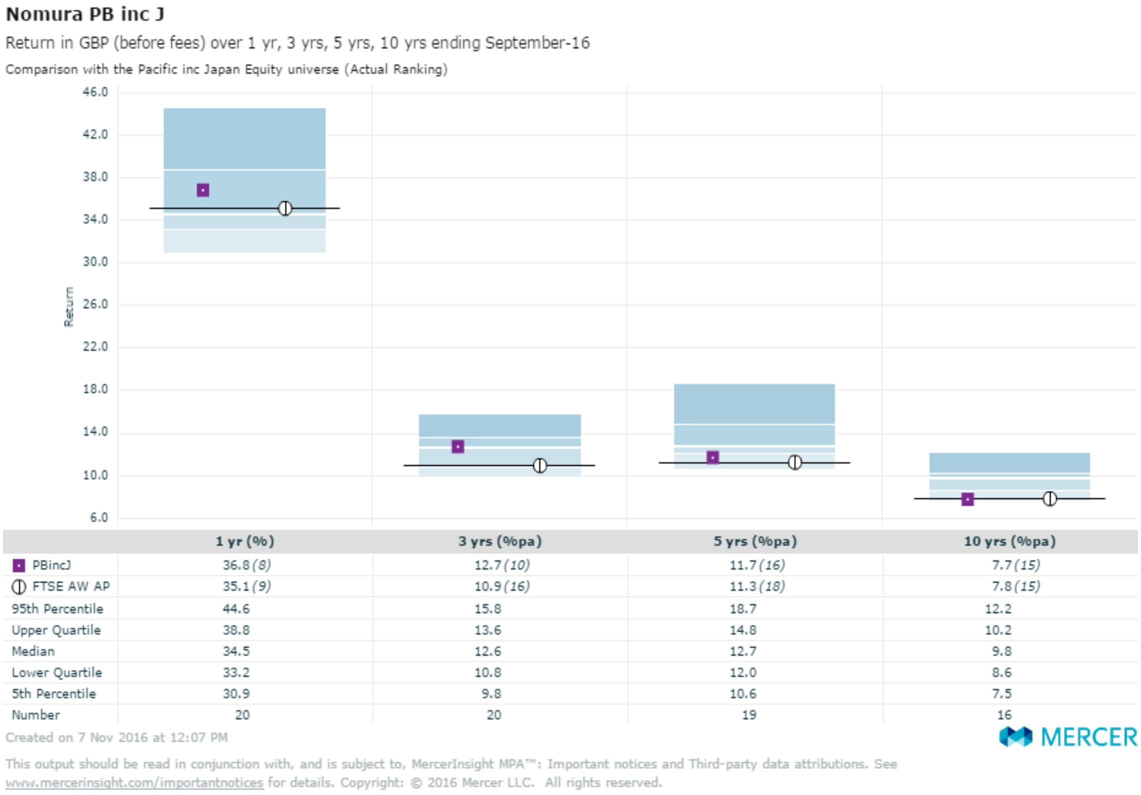


12.12 In terms of percentile numbers Schroders were 38th over one year, 55th over the last three years and 35th over the past five years. JP Morgan fell behind Schroders over each of these periods but argue this is due to their Value style underperforming Growth style over the same periods.

Nomura – Developed Far East equities

12.13 Figure 16 below has been provided by Nomura to evidence their performance compared to peers for various periods over the past ten years. The analysis has been run from the Mercer Insight database.

Figure 16



Nomura PB inc J

Return in GBP (before fees) over 1 yr, 3 yrs, 5 yrs, 10 yrs ending September-16

Comparison with the Pacific inc Japan Equity universe (Actual Ranking)

	1 yr (%)	3 yrs (%pa)	5 yrs (%pa)	10 yrs (%pa)
■ PBincJ	36.8 *(8)*	12.7 *(10)*	11.7 *(16)*	7.7 *(15)*
⦶ FTSE AW AP	35.1 *(9)*	10.9 *(16)*	11.3 *(18)*	7.8 *(15)*
95th Percentile	44.6	15.8	18.7	12.2
Upper Quartile	38.8	13.6	14.8	10.2
Median	34.5	12.6	12.7	9.8
Lower Quartile	33.2	10.8	12.0	8.6
5th Percentile	30.9	9.8	10.6	7.5
Number	20	20	19	16

Created on 7 Nov 2016 at 12:07 PM

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12.14 The analysis is consistent with the message Nomura have conveyed to the Pension Committee in terms of their continued improvement in relative performance, evidenced by the fact that the 1 year return comparison shows Nomura above median and the 3 year number also moving back above median with the portfolio right in the middle of the universe.

Conclusion

12.15 It is best practice to review active manager arrangements to ensure that the Fund is still employing the best managers for the selected mandates.

12.16 From the peer group evidence provided it is clear that the Fund doesn't currently contract best in class active managers but neither do we have the lowest performing. There is significant manager selection risk involved with trying to select the best in class managers, with manager performance rotation an issue over the short term, and therefore it is not recommend to change managers at this time and potentially incur double transaction costs when asset pooling involving LGPS Central is due to commence in April 2018.

Review of the Fund's exposure to currency and inflation risk Background

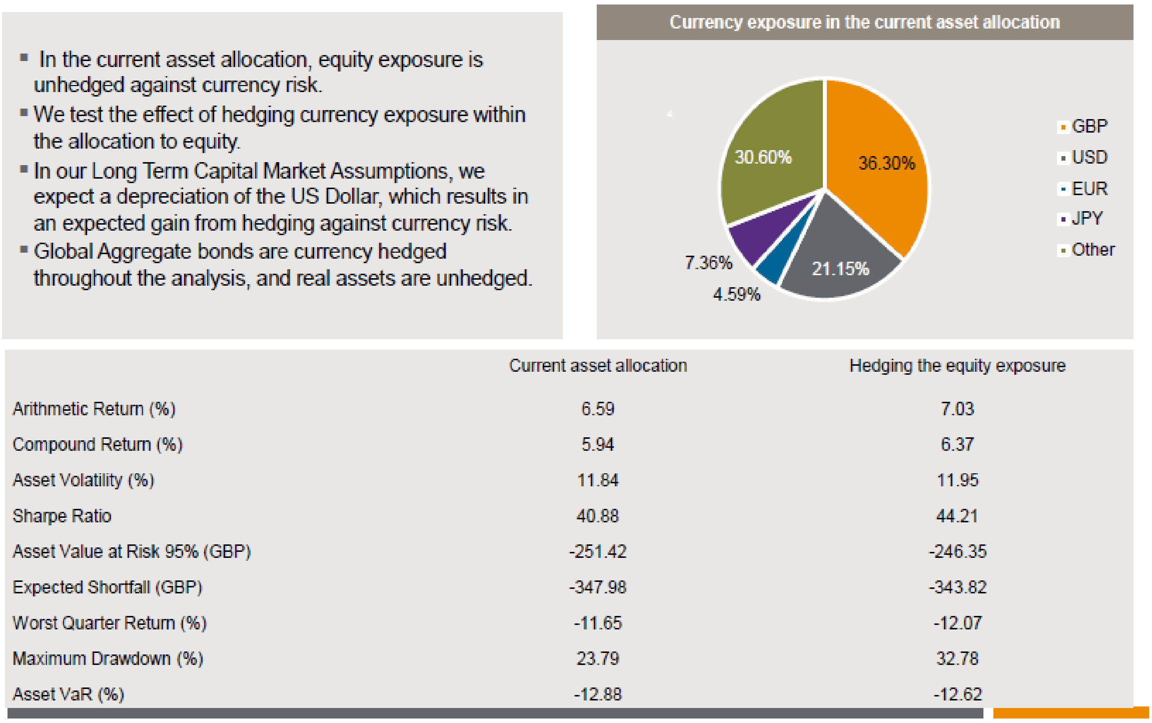
12.17 There exists the potential for the Fund to be impacted by rising inflation and currency movements. As part of the review of potential risks to the Fund’s assets and returns, an assessment of the potential impact of an increase in inflation and substantial movements in key currencies has been undertaken.

12.18 Mitigating the impact of currency movements can be considerably more complicated, but again this is a potential key risk when investing in non-Sterling assets, at both the asset level and to interest payments. The usual arrangement would be to hedge against the impact of adverse currency movements, but as this comes at a cost it would need to be considered as part of the investment assessment. Some Funds use their custodian to arrange currency hedging on a passive basis; others have employed managers to hedge currency exposures in a more dynamic process.

Currency hedge risk and return analysis

12.19 Figure 17 below shows analysis provided by JP Morgan comparing the current unhedged Fund equities exposure vs a fully hedged portfolio.

Figure 17



- In the current asset allocation, equity exposure is unhedged against currency risk.
- We test the effect of hedging currency exposure within the allocation to equity.
- In our Long Term Capital Market Assumptions, we expect a depreciation of the US Dollar, which results in an expected gain from hedging against currency risk.
- Global Aggregate bonds are currency hedged throughout the analysis, and real assets are unhedged.

Currency exposure in the current asset allocation

	Current asset allocation	Hedging the equity exposure
Arithmetic Return (%)	6.59	7.03
Compound Return (%)	5.94	6.37
Asset Volatility (%)	11.84	11.95
Sharpe Ratio	40.88	44.21
Asset Value at Risk 95% (GBP)	-251.42	-246.35
Expected Shortfall (GBP)	-347.98	-343.82
Worst Quarter Return (%)	-11.65	-12.07
Maximum Drawdown (%)	23.79	32.78
Asset VaR (%)	-12.88	-12.62

12.20 The above analysis contains a key prediction that the US dollar will depreciate over the long-term. Based on this expectation hedging currency risk results in a higher return expectation with little increase in risk. However in the short term there is likely to be significant currency volatility given the recent Brexit referendum decision and the recent fall in Sterling. Hedging currency also comes at a cost albeit on the low side, therefore the cost of a hedge has to be measured against the potential benefit in each case. Any hedging strategy could be quickly implemented through LGIM either for only the passive holdings through alternative LGIM currency hedged pooled funds or across the Fund's entire equity holdings through a currency overlay service offered by LGIM.

Inflation hedge

12.21 Based on JP Morgan's assumptions and analysis there is no statistical relationship between the Fund's current portfolio and UK inflation. Inflation only accounts for approximately 10% to 12% of portfolio returns and most of this can be attributed to the Fund's Infrastructure and Real Estate investments. Equities are a poor hedge for inflation and the Fund's current 80% allocation to equities explains the low total portfolio statistical relationship to UK inflation and therefore inflation risk is currently considered high for the total portfolio.

Conclusion

12.22 Based on JP Morgan's expectation that the U.S. Dollar will depreciate in the long term the analysis provided makes a decent case for hedging overseas currencies for the Fund's equities portfolios. However in the short term Sterling is likely to be volatile, so it is recommended to keep currency hedging under review rather than implement at present. The Fund is also running significant inflation risk and strategies should be considered to reduce this risk overtime.

12.23 It is recommended that the Fund's equities remain unhedged in terms of currency at least until the Brexit negotiations are finalised, as this is likely to be a volatile period for Sterling with potential further falls in the currency over the next few years. The decision of whether to currency hedge overseas equities should be kept under review by the Pension Committee at least annually.

Review of the Property and Infrastructure allocation Current allocation to Infrastructure and Real Estate

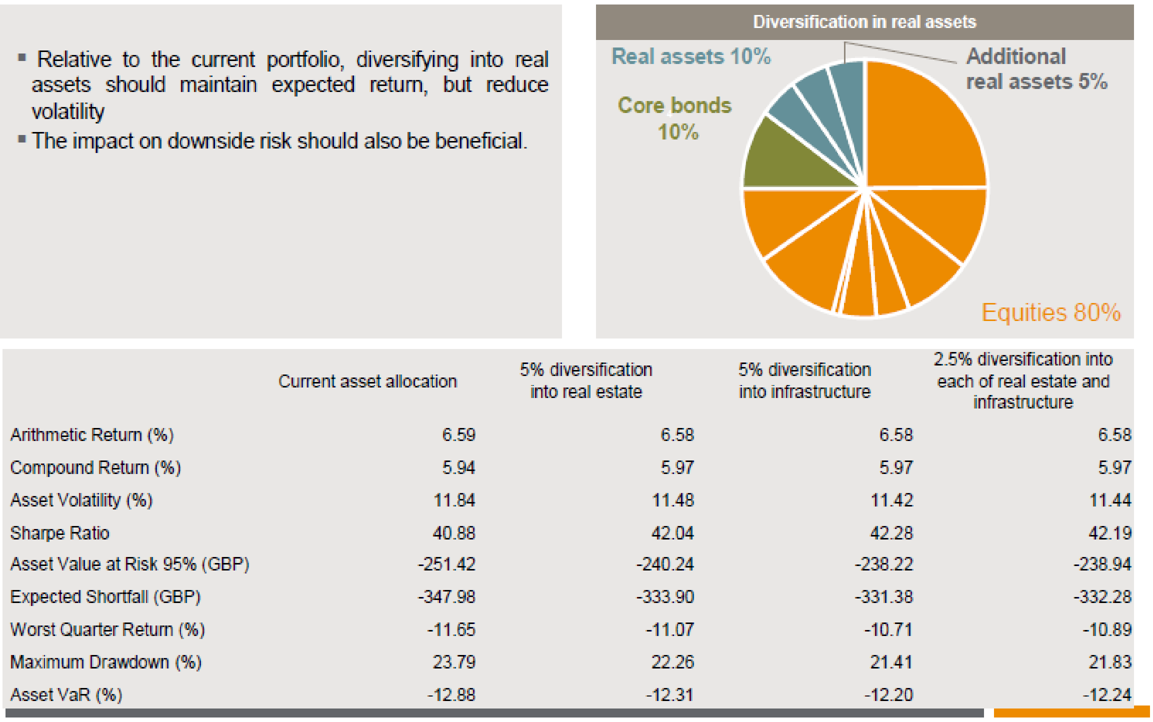
12.24 Following the Shadow Pension Committee's decision at the November 2013 asset allocation review to transition 10% of the fund's assets into Infrastructure and Real Estate Funds, on 8th June 2015 the Shadow Pension Committee approved the appointment of three Property pooled fund managers and two Infrastructure pooled fund managers. This followed a competitive procurement exercise run by Bfinance and associated due diligence carried out on shortlisted managers.

12.25 The current allocation targets a net IRR of 7.7% with a total fee load of 1.04%. The Pension Committee on 26th September 2016 also approved an additional £10m investment to one of the Fund's Infrastructure managers, Green Investment Bank, following appropriate due diligence carried out by Fund officers.

Impact on the total portfolio return and risk profile of an increased 5% allocation to Infrastructure, Real Estate or a combination of each.

12.26 Figure 18 below shows analysis carried out by JP Morgan regarding a 5% transition of assets from Equities to Infrastructure, Real Estate or a combination of each.

Figure 18



- Relative to the current portfolio, diversifying into real assets should maintain expected return, but reduce volatility
- The impact on downside risk should also be beneficial.

	Current asset allocation	5% diversification into real estate	5% diversification into infrastructure	2.5% diversification into each of real estate and infrastructure
Arithmetic Return (%)	6.59	6.58	6.58	6.58
Compound Return (%)	5.94	5.97	5.97	5.97
Asset Volatility (%)	11.84	11.48	11.42	11.44
Sharpe Ratio	40.88	42.04	42.28	42.19
Asset Value at Risk 95% (GBP)	-251.42	-240.24	-238.22	-238.94
Expected Shortfall (GBP)	-347.98	-333.90	-331.38	-332.28
Worst Quarter Return (%)	-11.65	-11.07	-10.71	-10.89
Maximum Drawdown (%)	23.79	22.26	21.41	21.83
Asset VaR (%)	-12.88	-12.31	-12.20	-12.24

12.27 The analysis shows that a 5% allocation change would maintain total portfolio expected returns whilst reducing asset volatility by 0.4% and downside risk by around 0.6%.

Conclusion

12.28 Increased allocation to Infrastructure, Real Estate or a combination of each is expected to maintain expected return, reduce risk / volatility and add some inflation hedge to the overall portfolio.

12.29 It is recommended that a 5% increased allocation to Infrastructure is implemented or a mix of Infrastructure and Real Estate. It is recommended that the 5% be transitioned from the Fund's Equity allocation. The allocation change is expected to maintain expected return, reduce risk / volatility and add some inflation hedge to the overall portfolio. The 5% change as opposed to 10% is recommended at this stage to ensure the appointment and monitoring of the investments is manageable given the Fund's current resources.

12.30 It is further recommended that Fund Officers:

a) Determine the optimal allocation of the 5% increase to Infrastructure or a mix of Infrastructure and Real Estate either through a tender or increased allocation to the Fund's current pooled funds or a mix of both options.

b) Start "rolling" the investment programme to reinvest distributions and to provide a spread over "vintage" years. Hopefully this will also enable investments to be made as attractive opportunities occur, when valuations in sub sectors look particularly attractive.

13 Future Strategic Asset Allocation considerations

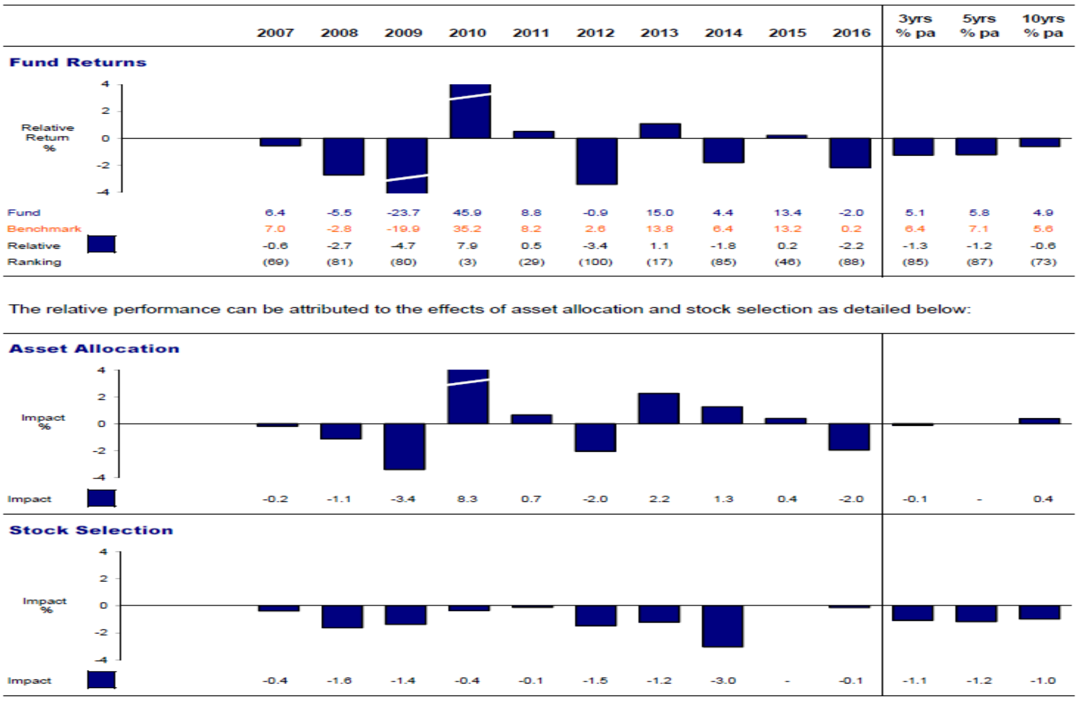
13.1 This section sets out future considerations that will the Fund will need to plan for, clarification of the Fund's main investment objective as well as proposals around potential increased investment to Infrastructure and potentially Real Estate, along with potential increase to alternative indices within the Fund's passive equities portfolio.

Clarification of the Fund's investment objectives from 2017 onwards

13.2 The objective of the Fund should be to maintain returns that the Fund is currently delivering within a structure that achieves reduced volatility and improved diversification.

13.3 Figure 19 below illustrates the Fund performance versus the WM LGPS universe over the last 10 years and demonstrates the volatility of returns against that benchmark. It does however show that over the long term asset allocation has been a positive relative factor for the Fund, whilst stock selection by the Fund's active managers has resulted in underperformance against the LGPS average Fund.

Figure 19



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	3yrs % pa	5yrs % pa	10yrs % pa
Fund	6.4	-5.5	-23.7	45.9	8.8	-0.9	15.0	4.4	13.4	-2.0	5.1	5.8	4.9
Benchmark	7.0	-2.8	-19.9	35.2	8.2	2.6	13.8	6.4	13.2	0.2	6.4	7.1	5.6
Relative ■	-0.6	-2.7	-4.7	7.9	0.5	-3.4	1.1	-1.8	0.2	-2.2	-1.3	-1.2	-0.6
Ranking	(69)	(81)	(80)	(3)	(29)	(100)	(17)	(85)	(46)	(88)	(85)	(87)	(73)
Asset Allocation Impact ■	-0.2	-1.1	-3.4	8.3	0.7	-2.0	2.2	1.3	0.4	-2.0	-0.1	-	0.4
Stock Selection Impact ■	-0.4	-1.6	-1.4	-0.4	-0.1	-1.5	-1.2	-3.0	-	-0.1	-1.1	-1.2	-1.0

13.4 The level of volatility that is displayed can have implications for contribution levels. Fund contributors, both employers and employees, wish to see stable contribution levels. These contributors can be put under pressure by large falls in Fund values.

13.5 While the larger employers in the Fund maybe in a position to manage a wide range in valuations over a number of years, the smaller admitted bodies may not wish to see this level of volatility in returns. If lower volatility can be achieved without reducing total returns, this will enable a closer correlation between the Fund's assets and the longer term liability profile.

13.6 A diversification of asset classes not only helps to reduce volatility by being potentially contra cyclical, but some asset classes can help mitigate against the potential negative impacts of inflation, For example some property and infrastructure investments can be structured so as to produce returns that are on an RPI/CPI uplift basis.

13.7 In support of the funding recovery plan the portfolio of assets held by the Fund needs to be managed in a manner that produces the best possible returns while controlling the potential risk of a diminution in the value of the asset base. In reality this is a balancing act between risk and reward, often with a core of low risk assets producing low returns alongside an element of higher risk assets in the expectation that higher returns will result.

13.8 As part of this review an analysis has been undertaken of the risk profile of the Fund with the existing asset allocation, alongside some potential scenarios were we would seek to maintain the returns available with a reduction in the risk profile. It should be stressed that this analysis can only be based on existing known risks, as often risk profiles change as circumstances change in the future. This is similar to the assumptions that lie behind the actuarial valuation changing, thereby changing the funding position by default.

13.9 The main objective here is to understand the risk profile, both now and in the future, because this enables action to be taken to mitigate that risk as necessary.

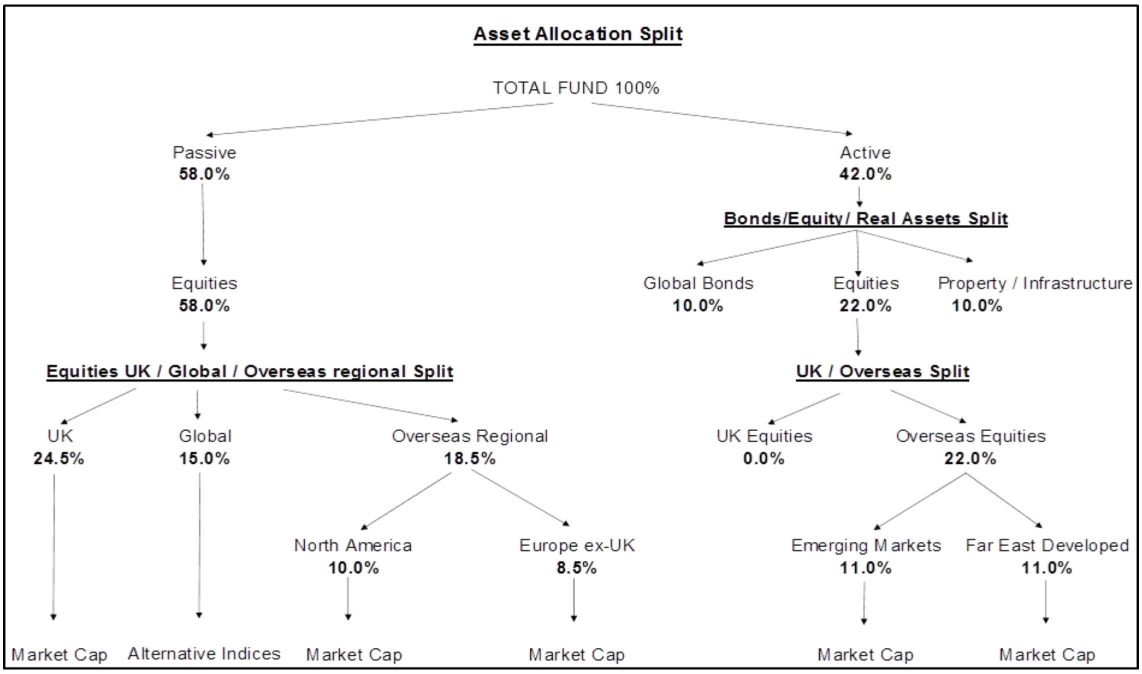
13.10 The aim of investment risk management should be to minimise the risk of an overall reduction in the value of the Fund and to maximise the opportunity for gains across the whole Fund portfolio. This is achieved by asset diversification to reduce exposure to market risk (price risk, currency risk and interest rate risk) to an acceptable level.

14 Summary of the proposal's impact on the Strategic Asset Allocation

Proposals Summary

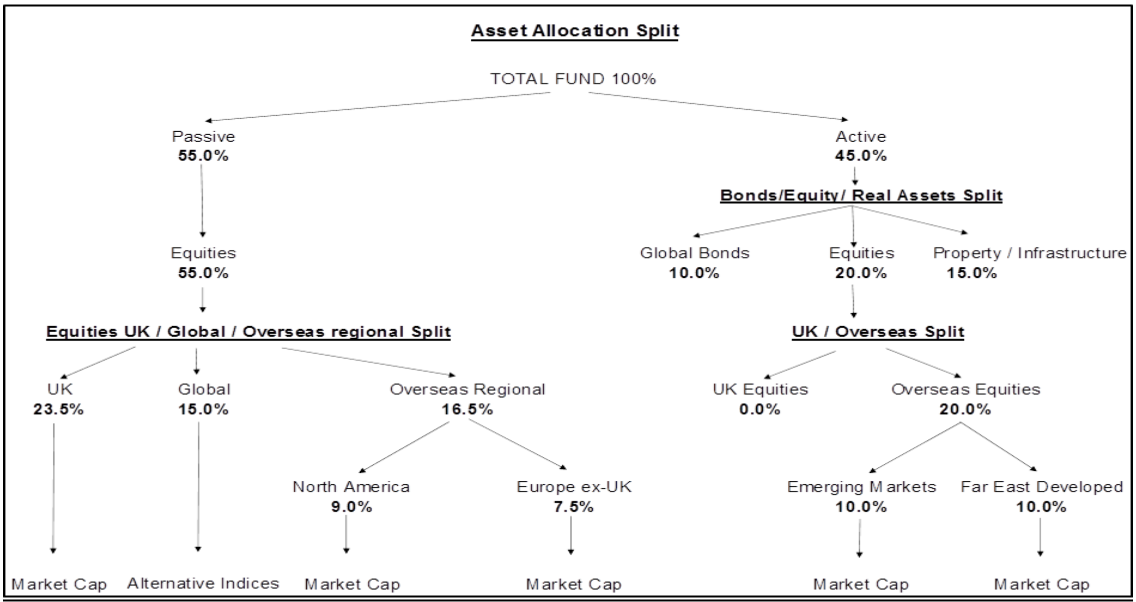
14.1 The tree diagram, Figure 20, below details the structure change from increasing the Fund's allocation to alternative indices within the Fund's passive Equities allocation, whilst reducing exposure to purely Market Cap indices. The change has been implemented through a 1% reduction to each regional Equity allocation.

Figure 20


Asset Allocation Split
TOTAL FUND 100%
Passive
58.0%
Active
42.0%
Bonds/Equity/ Real Assets Split
Equities
58.0%
Global Bonds
10.0%
Equities
22.0%
Property / Infrastructure
10.0%
Equities UK / Global / Overseas regional Split
UK / Overseas Split
UK
24.5%
Global
15.0%
Overseas Regional
18.5%
UK Equities
0.0%
Overseas Equities
22.0%
North America
10.0%
Europe ex-UK
8.5%
Emerging Markets
11.0%
Far East Developed
11.0%
Market Cap
Alternative Indices
Market Cap
Market Cap
Market Cap
Market Cap

14.2 The tree diagram, Figure 21, below details the structure change after increasing the Fund's allocation to alternative indices within the Fund's passive equities allocation, whilst reducing exposure to purely Market Cap indices and including a 5% increase to Infrastructure / Real Estate. The change has again been implemented through a 1% reduction to each regional equity allocation.

Figure 21


Asset Allocation Split
TOTAL FUND 100%
Passive
55.0%
Active
45.0%
Bonds/Equity/ Real Assets Split
Equities
55.0%
Global Bonds
10.0%
Equities
20.0%
Property / Infrastructure
15.0%
Equities UK / Global / Overseas regional Split
UK / Overseas Split
UK
23.5%
Global
15.0%
Overseas Regional
16.5%
UK Equities
0.0%
Overseas Equities
20.0%
North America
9.0%
Europe ex-UK
7.5%
Emerging Markets
10.0%
Far East Developed
10.0%
Market Cap
Alternative Indices
Market Cap
Market Cap
Market Cap
Market Cap

14.3 It is recommended that the asset allocation structural changes be implemented through an overall 2% reduction to each regional market capitalisation indices passive and active Equity allocation in order to; reduce portfolio active risk, which is not necessarily rewarded, and reduce portfolio concentration to large cap companies and therefore increase diversification across the number and size of companies in which the portfolio invests. Proposed asset allocation structure and tolerance ranges

14.4 The new structure is designed to maintain current long term expected returns whilst reducing asset volatility and downside risk and thus reducing the volatility of the Fund during periods of economic crisis.

14.5 The 5% increased allocation to Infrastructure and Property from Equities is designed to maintain expected returns, reduce volatility and increase the level of inflation hedge within the portfolio. The increase in global alternative indices passive Equities from the Fund's active and passive regional Equity allocation is expected to at least maintain expected returns whilst further diversifying the portfolio and therefore reducing portfolio volatility.

14.6 The recommendation to move to passive investment in North America Equities, following the termination of Capital International, is aimed to at least maintain returns whilst removing unrewarded active risk from the portfolio.

14.7 Whilst a number of academic papers exist that argue rebalancing investment portfolios on a regular basis can add a rebalancing premium in market capitalisation equity indices, one must also fully take into account the transaction costs associated with rebalancing. It is important to maintain flexibility within the portfolio in order to take into account external risks such as Central Banks unwinding Quantitative Easing programmes and the impact that will have on markets. Flexibility is also required when investing in Infrastructure and Property funds, as drawdown periods can be lengthy and a programme of rolling reinvestment will require time to fully implement efficiently.

Tolerance ranges

14.8 It is recommended that tolerance ranges as set out in Table 12 below are implemented and maintained to allow the required portfolio flexibility.

Table 12

Asset Type	Core Asset Allocation	Range %
Equities	75%	70 - 85
Bonds	10%	5 – 15
Infrastructure and Property	15%	5 – 15

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worcestershire
countycouncil

AGENDA ITEM 7

PENSIONS COMMITTEE
7 DECEMBER 2016

ACTUARIAL VALUATION

Recommendation

1. **The Chief Financial Officer recommends that:**

   a) **the results of the Actuarial Valuation be noted; and**

   b) **the Funding Strategy Statement be approved.**

Background

2. Every three years, in line with legislation, the Fund Actuary, Mercer, carries out a full Actuarial Valuation of the Fund to calculate how much the employers in the Scheme need to contribute going forward to ensure that its liabilities, the pensions due to current and future pensioners, will be paid as they fall due.

3. The purpose of the Funding Strategy Statement ("FSS") is to set out a clear and transparent funding strategy that will identify how each Fund employer's pension liabilities are to be met going forward.

Actuarial Valuation

4. The results at a total Fund level are shown in Appendix 1 to this report. The Fund's funding level has increased from 69% funded at 31 March 2013 to 76% at 31 March 2016. Total contributions are expected to increase for 2017/18 above those planned following the 2013 Actuarial Valuation by £1.0m (£87.6m compared to £86.6m).

Funding Strategy Statement

5. The Funding Strategy Statement is attached as Appendix 2 to this report. The key points of the statement are shown below:

- The target recovery period for the Fund as a whole is 18 years at this valuation which is 3 years shorter than the corresponding recovery period from the previous valuation. Subject to affordability and other considerations, individual employer recovery periods would also be expected to reduce by 3 years at this valuation.
- Following a key change to the method of valuing the Fund's liabilities from Gilts+ to CPI+, it is proposed at this valuation the real return over CPI inflation for determining the past service liabilities is 2.15% per annum and for determining the future service ("Primary") contribution rates is 2.75% per annum.

Contact Points

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Specific Contact Points for this report
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Supporting Information

- Actuarial Valuation Results Presentation (Appendix 1)
- Funding Strategy Statement (Appendix 2)

Background Papers

In the opinion of the proper officer (in this case the Chief Financial Officer) there are no background papers relating to the subject matter of this report.

WORCESTERSHIRE COUNTY COUNCIL PENSION FUND

2016 ACTUARIAL VALUATION

Ian Kirk FIA

Leanne Johnston FIA

MAKE TOMORROW, TODAY

MERCER

VALUATION BASICS
IN SIMPLE TERMS

Has the Fund got enough assets to cover expected benefits built up to date

PAST
FUTURE

How much will the Employers have to pay for benefits earned in the future?

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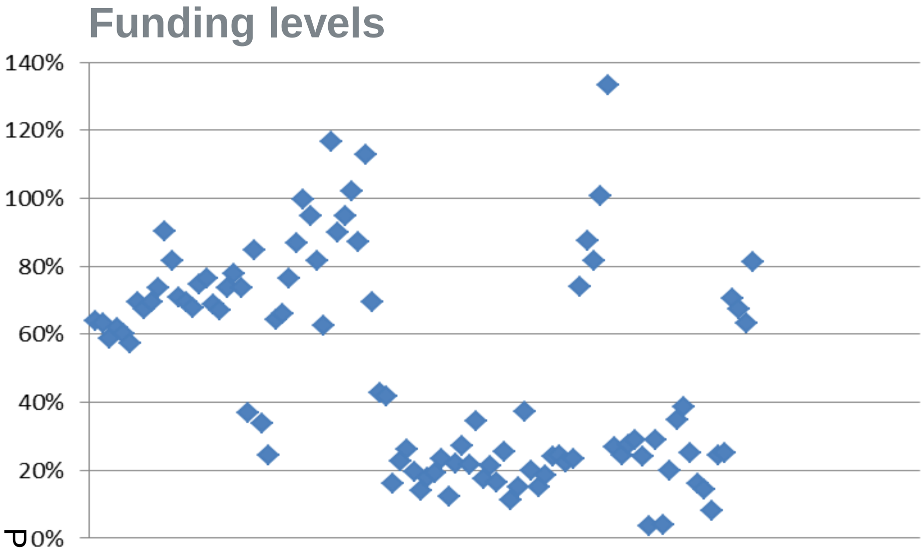
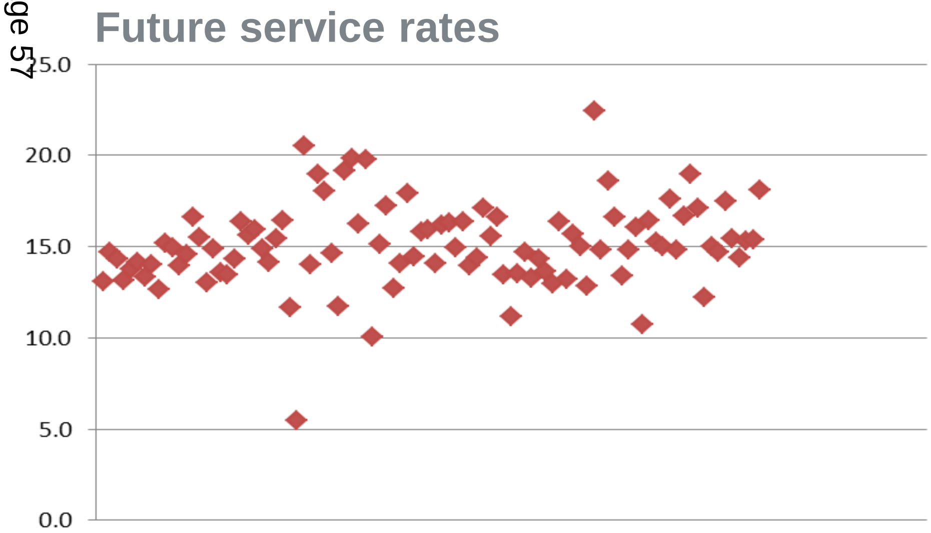
2013 VALUATION - INDIVIDUAL EMPLOYERS
REMINDER OF OUTCOMES





Key points on 2013 outcomes:

- Majority of funding levels had fallen between 2010 and 2013. Main reason was due to increase in liabilities caused by falling gilt yields.
- Improvement in funding levels post 31 March 2013 were taken into account when setting recovery plans.
- Recovery periods were set at an individual employer level up to a maximum of 21 years.
- Deficit contributions were indexed in line with assumed pay growth (4.1% p.a.).
- In certain cases, some phasing of contribution increases was permitted on affordability grounds.

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2016 VALUATION FUNDING STRATEGY

KEY POINTS

DISCOUNT RATE – LINKED EXPLICITLY TO REAL RETURNS VERSUS CPI

UPDATE DEMOGRAPHIC ASSUMPTIONS, PRIMARILY LIFE EXPECTANCY. CONSIDER SHORT TERM SALARY GROWTH.

SUBJECT TO REASONABLE AFFORDABILITY, AIM TO CONTINUE WITH RECOVERY PLANS AGREED IN 2013 TO DEMONSTRATE GOOD PROGRESS TOWARDS ELIMINATING FUNDING DEFICITS

CONSIDER THE IMPACT OF BREXIT AND INTEREST RATE CHANGE ON FUNDING STRATEGY

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FUNDING FRAMEWORK

ASSET RETURNS COMPARED TO CPI

Broadly speaking, there are two measures where the Fund’s returns need to “beat” CPI to reduce long term costs and therefore contribution requirements:

Long term CPI expectations

- Impacts the value placed on the Fund’s liabilities.
- Drives contribution rates and the amount the Fund needs to hold in reserves as part of the long term funding arrangements.
- The Fund requires long term investment returns in excess of CPI

Short term (year-on-year) CPI changes

- Impacts the increase to members’ pensions each year.
- There will inevitably be short term fluctuations between movements in CPI and the Fund’s short term asset returns.

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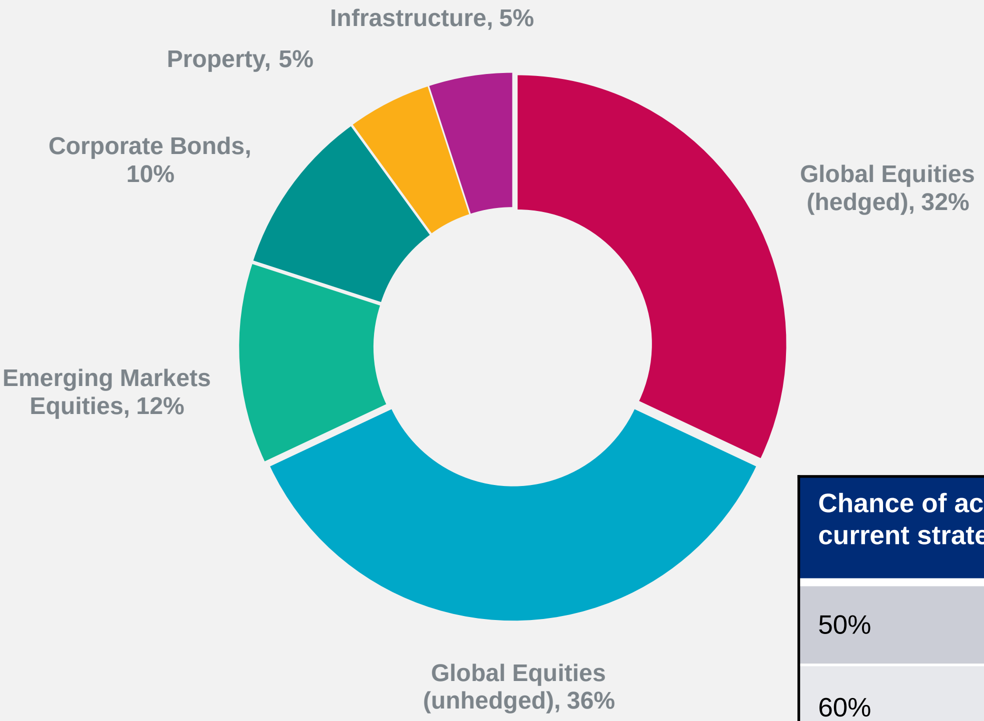
DISCOUNT RATE

EXPECTED INVESTMENT RETURNS

Page 60

Current asset allocation



Chance of achieving return on current strategy	Expected Real Return
50%	CPI + 3.7% p.a.
60%	CPI + 2.8% p.a.
c. 67%	**CPI + 2.15% p.a.**
75%	CPI + 1.2% p.a.

More prudent

“Best estimate”

Prudent AOA

2016 ACTUARIAL VALUATION

INTERVALUATION EXPERIENCE – WHOLE FUND

Actual vs Expected	Impact on deficit /contributions	Comment
Investment returns	↘	Returns have exceeded 2013 assumption
Membership Profile	→	No change to FSR due to change in membership profile
CPI Pension Increases	↘	Overall liabilities are around 3% lower compared to those expected
Pensioner Deaths	↘	Analysis shows that the impact on liabilities is slightly positive
Pay Increases	↗	Impact on total liabilities is an increase of around 1%.
Early leavers	↘	Impact on total liabilities is a decrease of around 1%
Other factors e.g. ill health, bulk transfers, transfer-in strains etc.	↘	Probation transfer improved whole Fund position. Other factors had marginal impact compared to those above.

IMPACT ON INDIVIDUAL EMPLOYERS WILL VARY

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2016 ACTUARIAL VALUATION

DEMOGRAPHIC ASSUMPTIONS UPDATE – WHOLE FUND

Analysis	Effect on Deficit (Whole Fund)	Effect on Future Service Rate (Whole Fund)	Comment in relation to Fund
Life Expectancy	↘	↘	Analysis indicates reductions from last time
Ill-Health Retirement	→	→	No change from 2013 assumption
Withdrawal	→	→	No change from 2013 assumption
50/50	→	→	No change from 2013 assumption
Commutation	→	→	No change from 2013 assumption
Proportions Married / Dependants	→	→	Marginal impact only

IMPACT ON INDIVIDUAL EMPLOYERS WILL VARY

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2016 ACTUARIAL VALUATION
PRELIMINARY RESULTS AS AT 31 MARCH 2016

Discount Rate	31 March 2013	31 March 2016	
	Final Results	Real Return of CPI plus 2.15% p.a.	Like for like with 2013 Basis
Assets	£1,721m	£1,952m	£1,952m
Liabilities	£2,488m	£2,582m[1]	£2,892m[2]
Deficit	£767m	£630m	£940m
Funding Level	69%	76%	68%
Employer Future Service Rate (% of pay per annum)	14.1%[3]	15.1%[3]	14.0%[3]
Illustrative deficit contributions payable over c18 years (2017/18) indexed with assumed long term pay growth	£38.7m p.a.[4]	£36.3m p.a.	£52.0m p.a.
Average Future Service Contributions (2017/18) based on estimated payroll of c£340m for 2017/18	£47.9m p.a.	£51.3m p.a.	£47.6m p.a.
Total contributions payable	£86.6m p.a.	£87.6m p.a.	£99.6m p.a.

[1] 2016 figures include allowance for short term pay of 1% p.a. for 4 years up to 2019/20 for all employers for illustration

[2] Like for like figures include allowance for the residual 2013 short term pay assumption of 2% p.a. for 2 years up to 2017/18 for all employers for illustration

[3] Allows for different discount rate assumption to past service (CPI plus 3% p.a. at 2013 and CPI plus 2.75% p.a. at 2016)

[4] Certified deficit contributions emerging from 2013 valuation. Theoretical deficit contributions would have been £39.5m p.a. at 2017/18 based on updated funding position as at 31 August 2013.

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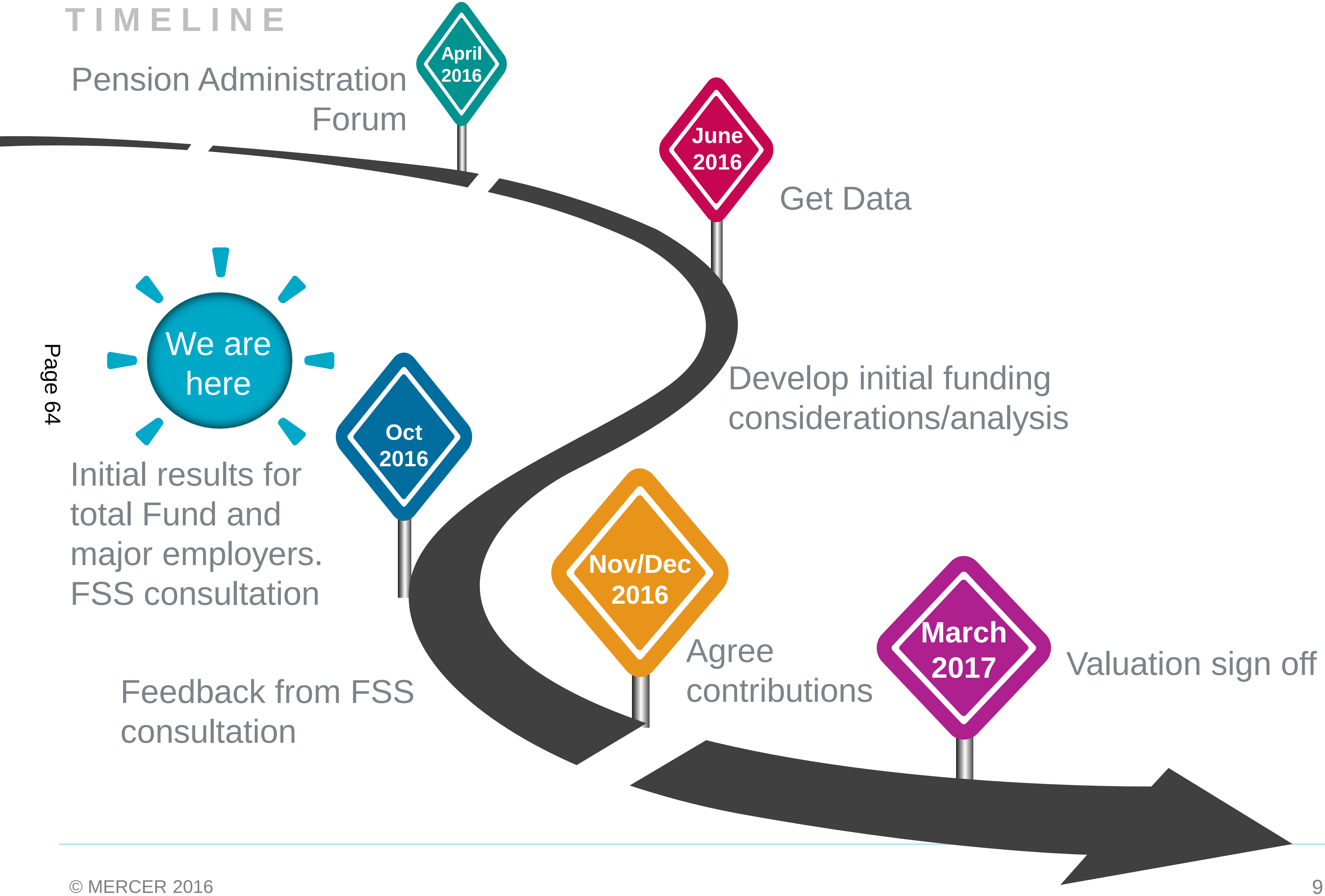
2016 VALUATION TIMELINE


April 2016
Pension Administration Forum
June 2016
Get Data
Develop initial funding considerations/analysis
We are here
Oct 2016
Initial results for total Fund and major employers. FSS consultation
Nov/Dec 2016
Feedback from FSS consultation
Agree contributions
March 2017
Valuation sign off

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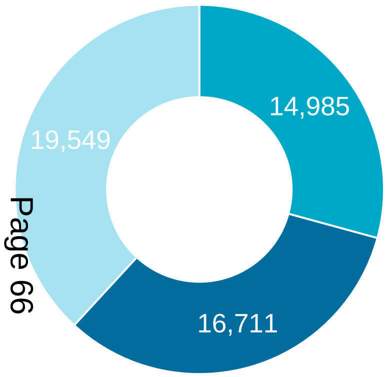
APPENDIX

OVERVIEW OF FUND PROFILE

MEMBERSHIP DETAILS

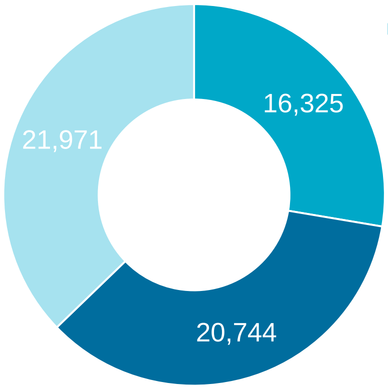
MEMBERSHIP DETAILS PROVIDED BY THE FUND



MEMBERSHIP DEVELOPMENT

31 MARCH 2013

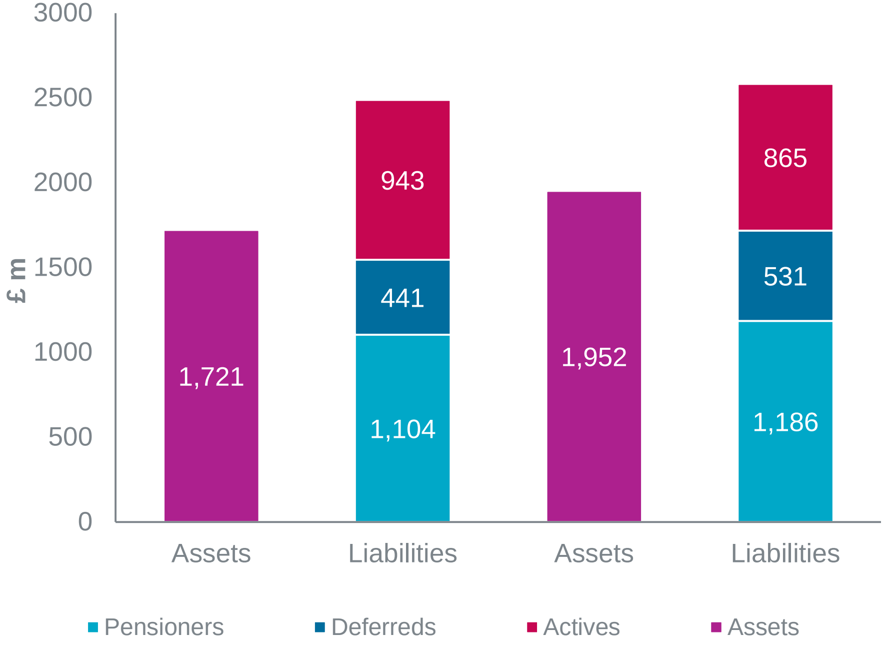
Total membership – 51,245



31 MARCH 2016

Total membership – 59,040

31 MARCH 2013   31 MARCH 2016



FUND MEMBERSHIP

MEMBERSHIP ANALYSIS

	31 March 2013	31 March 2016
Active members		
Number	19,549	21,971
Total Pensionable Salaries (£000s p.a.)[1]	315,646	336,420
Average Pensionable Salary (£ p.a.)	16,146	15,312
Average age[2]	49.8	49.9
Average accrued pension	2,740	2,516
Deferred pensioners[3]		
Number	16,711	20,744
Total deferred pensions revalued to valuation date (£000s p.a.)	23,423	30,015
Average deferred pension (£ p.a.)	1,402	1,447
Average age[2]	48.7	49.2
Current Pensioners and Dependants		
Number	14,985[4]	16,325
Total pensions payable (£000s p.a.)	69,075	76,553
Average Pension	4,610	4,689
Average Age[2]	70.0	70.6

[1] Including actual pay for part time members
[2] Weighted by accrued pension/deferred pension/pension
[3] Including frozen refunds
[4] Also an additional 127 current dependant pensioners

FINANCIAL ASSUMPTIONS

Market yields	31 March 2013	31 August 2013	31 March 2016
Fixed interest gilt yield	3.2% p.a.	3.6% p.a.	2.2% p.a.
Index-linked gilt yield	-0.4% p.a.	0.0% p.a.	-1.0% p.a.
Assumed CPI price inflation (derived by differencing yields on fixed-interest and index-linked gilts less 1% p.a.)	2.6% p.a.	2.6% p.a.	2.2% p.a.
Assumptions used for Liabilities			
Derivation of Discount Rate /Expected Return	CPI plus 2.1% p.a. (Gilts + 1.5% p.a.)	CPI plus 2.5% p.a. (Gilts +1.5% p.a.)	CPI plus 2.15% p.a.
Discount rate:	4.7% p.a.	5.1% p.a.	4.35% p.a.
Inflation: Consumer Prices Index (CPI)	2.6% p.a.	2.6% p.a.	2.2% p.a.
Long term pay growth assumption	4.1% p.a.	4.1% p.a.	3.7% p.a.
Pension increases	2.6% p.a.	2.6% p.a.	2.2% p.a.
Short term pay growth assumption	1.0% p.a. for 3 years 2.0% p.a. for 2 years	1.0% p.a. for 3 years 2.0% p.a. for 2 years	1% p.a. to 31 March 2020

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GLOSSARY

GLOSSARY

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

Benchmark: a measure against which fund performance is to be judged.

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

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

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

CPI: acronym standing for "**C**onsumer **P**rices **I**ndex". CPI is a measure of inflation with a basket of goods that is assessed on an annual basis. The reference goods and services differ from those of RPI. These goods are expected to provide lower, less volatile inflation increases. Pension increases in the LGPS are linked to the annual change in CPI.

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

Discount Rate: the rate of interest used to convert a cash amount occurring in the future to a present value.

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

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

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

Funding Level: the difference between the value of the Fund's assets and the value of the Fund's liabilities expressed as a percentage.

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

Funding Target: an assessment of the present value of benefits to be paid in the future. Under the current Funding Strategy Statement, the desired funding target is equal to the past service liabilities assessed on the ongoing basis.

Government Actuary's Department (GAD): the GAD are responsible for providing actuarial advice to public sector clients. GAD is a non-ministerial department of HM Treasury.

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

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

Percentiles: relative ranking (in hundredths) of a particular range. For example, in terms of expected returns a percentile ranking of 75 indicates that in 25% of cases, the return achieved would be greater, and in 75% cases the return would be lower.

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

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

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

Real Return: a rate of return net of inflation.

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

Section 13 Valuation: in accordance with Section 13 of the Public Service Pensions Act 2014, the Government Actuary's Department (GAD) have been commissioned to advise the Department for Communities and Local Government (DCLG) in connection with reviewing the 2016 LGPS actuarial valuations. All LGPS Funds therefore will be assessed on a standardised set of assumptions as part of this process.

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

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ACTUARIAL ADVICE

- We have prepared this document for the Administering Authority for the purpose of planning for the 2016 Actuarial Valuation.
- Unless otherwise stated, we have relied on the information and data supplied to us in preparing the information, without independent verification. We will not be responsible for any inaccuracy in the advice that is a result of any incorrect information provided to us.
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- This presentation is correct as at 17 October 2016. It will not be updated unless requested.

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FUNDING STRATEGY STATEMENT

WORCESTERSHIRE COUNTY COUNCIL PENSION FUND

NOVEMBER 2016

Worcestershire County Council

This Funding Strategy Statement has been prepared by Worcestershire County Council (the Administering Authority) to set out the funding strategy for the Worcestershire County Council Pension Fund (the "Fund"), in accordance with Regulation 58 of the Local Government Pension Scheme Regulations 2013 (as amended) and guidance issued by the Chartered Institute of Public Finance and Accountancy (CIPFA).

EXECUTIVE SUMMARY

Ensuring that the Worcestershire County Council Pension Fund (the "Fund") has sufficient assets to meet its pension liabilities in the long term is the fiduciary responsibility of the Administering Authority (Worcestershire County Council). The Funding Strategy adopted by the Worcestershire County Council Pension Fund will therefore be critical in achieving this.

The purpose of this Funding Strategy Statement ("FSS") is to set out a clear and transparent funding strategy that will identify how each Fund employer's pension liabilities are to be met going forward.

The details contained in this Funding Strategy Statement will have a financial and operational impact on all participating employers in the Worcestershire County Council Pension Fund.

It is imperative therefore that each existing or potential employer is aware of the details contained in this statement.

Given this, and in accordance with governing legislation, all interested parties connected with the Worcestershire County Council Pension Fund have been consulted and given opportunity to comment prior to this Funding Strategy Statement being finalised and adopted. This statement takes into consideration all comments and feedback received.

THE FUND'S OBJECTIVE

The Administering Authority's long term objective is for the Fund to achieve a 100% solvency level over a reasonable time period and then maintain sufficient assets in order for it to pay all benefits arising as they fall due. This objective will be considered on an employer specific level where appropriate.

The general principle adopted by the Fund is that the assumptions used, taken as a whole, will be chosen sufficiently prudently for pensions already in payment to continue to be paid, and to reflect the commitments that will arise from members' accrued pension rights.

The funding strategy set out in this document has been developed alongside the Fund's investment strategy on an integrated basis taking into account the overall financial and demographic risks inherent in the Fund. The funding strategy includes appropriate margins to allow for the possibility of events turning out worse than expected.

SOLVENCY AND LONG TERM COST EFFICIENCY

Each employer's contributions are set at such a level to achieve full solvency in a reasonable timeframe. Solvency is defined as a level where the Fund's liabilities i.e. benefit payments can be reasonably met as they arise.

Employer contributions are also set in order to achieve long term cost efficiency. Long term cost-efficiency implies that contributions must not be set at a level that is likely to give rise to additional costs in the future. For example, deferring costs to the future would be likely to result in those costs being greater overall than if they were provided for at the appropriate time. Equally, the FSS must have regard to the desirability of maintaining as nearly constant a primary rate of contribution as possible.

When formulating the funding strategy, the Administering Authority has taken into account these key objectives and also considered the implications of the requirements under Section 13(4)(c) of the Public Service Pensions Act 2013. As part of these requirements the Government Actuary's Department (GAD) must, following an actuarial valuation, report on whether the rate of employer contributions to the Fund is set at an appropriate level to ensure the "solvency" of the pension fund and "long term cost efficiency" of the Local Government Pension Scheme (the "LGPS") so far as relating to the Fund.

DEFICIT RECOVERY PLAN AND CONTRIBUTIONS

As the solvency level of the Fund is 76% at the valuation date (i.e. the assets of the Fund are less than the liabilities), a deficit recovery plan needs to be implemented such that additional contributions are paid into the Fund to meet the shortfall.

Deficit contributions paid to the Fund by each employer will be expressed as £s amounts (flat or increasing year on year) and it is the Fund's objective that any funding deficit is eliminated as quickly as the participating employers can reasonably afford given other competing cost pressures. This may result in some flexibility in recovery periods by employer which would be at the sole discretion of the Administering Authority. The recovery periods will be set by the Fund, although employers will be free to select any shorter deficit recovery period if they wish. Employers may also elect to make prepayments of contributions which could result in a cash saving over the valuation certificate period.

The objective is to recover any deficit over a reasonable timeframe, and this will be periodically reviewed. Subject to affordability considerations a key principle will be to maintain the deficit contributions at least at the expected monetary levels from the preceding valuation (including any indexation in these monetary payments over the recovery period). Full details are set out in this FSS.

The target recovery period for the Fund as a whole is 18 years at this valuation which is 3 years shorter than the corresponding recovery period from the previous valuation. Subject to affordability and other considerations, individual employer recovery periods would also be expected to reduce by 3 years at this valuation.

Where there is an increase in contributions required at this valuation, at the sole discretion of the Administering Authority, the employer will be able to step-up their contributions over a period of up to 3 years.

ACTUARIAL ASSUMPTIONS

The actuarial assumptions used for assessing the funding position of the Fund and the individual employers, the "Primary" contribution rate, and any contribution variations due to underlying surpluses or deficits (i.e. the "Secondary" rate) are set out in Appendix B to this FSS.

The discount rate in excess of CPI inflation (the "real discount rate") has been derived based on the expected return on the Fund's assets based on the long term strategy set out in its Investment

Strategy Statement (ISS). When assessing the appropriate prudent discount rate, consideration has been given to the level of expected asset returns in excess of CPI inflation (i.e. the rate at which the benefits in the LGPS generally increase each year). It is proposed at this valuation the real return over CPI inflation for determining the past service liabilities is 2.15% per annum and for determining the future service ("Primary") contribution rates is 2.75% per annum (further detail on the assumptions is provided in Appendix A).

Where warranted by an employer's circumstances, the Administering Authority retains the discretion to apply a discount rate based on a lower risk investment strategy for that employer to protect the Fund as a whole. Following a period of consultation with the employer, such cases will be determined by the Section 151 Officer and reported to the Pension Committee.

The demographic assumptions are based on the Fund Actuary's bespoke analysis for the Fund, also taking into account the experience of the wider LGPS where relevant.

EMPLOYER ASSET SHARES

The Fund is a multi-employer pension fund that is not formally unitised and so individual employer asset shares are calculated at each actuarial valuation. This means it is necessary to make some approximations in the timing of cashflows and allocation of investment returns when deriving each employer's asset share.

At each review, cashflows into and out of the Fund relating to each employer, any movement of members between employers within the Fund, along with investment return earned on the asset share, are allowed for when calculating asset shares at each valuation.

Other adjustments are also made on account of the funding positions of orphan bodies which fall to be met by all other active employers in the Fund.

FUND POLICIES

In addition to the information/approaches required by overarching guidance and Regulation, this statement also summarises the Fund's practice and policies in a number of key areas:

1. Covenant assessment and monitoring

An employer's financial covenant underpins its legal obligation and crucially the ability to meet its financial responsibilities to the Fund now and in the future. The strength of covenant to the Fund effectively underwrites the risks to which the Fund is exposed. These risks include underfunding, longevity, investment and market forces.

The strength of employer covenant can be subject to substantial variation over relatively short periods of time and, as such, regular monitoring and assessment is vital to the overall risk management and governance of the Fund. The employers' covenants will be assessed and monitored objectively in a proportionate manner, and an employer's ability to meet their obligations in the short and long term will be considered when determining its funding strategy.

After the valuation, the Fund will continue to monitor employers' covenants in conjunction with their funding positions over the inter-valuation period. This will enable the Fund to anticipate and pre-empt any material issues arising and thus adopt a proactive approach in partnership with the employer. More details are provided in Appendix D to this statement.

2. Admitting employers to the Fund

Various types of employers are permitted to join the LGPS under certain circumstances, and the conditions upon which their entry to the Fund is based and the approach taken is set out in Appendix C. Examples of new employers include:

- Fund Employers
- Designated bodies - those that are permitted to join if they pass a resolution
- Admission bodies - usually arising as a result of an outsourcing or a transfer to an entity that provides some form of public service and their funding primarily derives from local or central government.

Certain employers may be required to provide a guarantee or alternative security before entry will be allowed, in accordance with the Regulations and Fund policies.

3. Termination policy for employers exiting the Fund

When an employer ceases to participate within the Fund, it becomes an exiting employer under the Regulations.   The Fund is then required to obtain an actuarial valuation of that employer’s liabilities in respect of the benefits of the exiting employer’s current and former employees, along with a termination contribution certificate.

Where there is no guarantor who would subsume the liabilities of the exiting employer, the Fund’s policy is that a discount rate linked to government bond yields and a more prudent longevity assumption is used for assessing liabilities on termination. Any exit payments due should be paid immediately although instalment plans will be considered by the Administering Authority on a case by case basis. The Administering Authority also reserves the right to modify this approach on a case by case basis if circumstances warrant it.

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Aims and purpose of the Fund 9
Responsibilities of the key parties 10
Solvency funding target 12
Link to investment policy and the Investment strategy statement (ISS) 15
Identification of risks and counter-measures 17
Monitoring and review 19

APPENDICES

A - ACTUARIAL METHOD AND ASSUMPTIONS
B - EMPLOYER DEFICIT RECOVERY PLANS
C - ADMISSION AND TERMINATION POLICY
D - COVENANT ASSESMENT AND MONITORING POLICY
E - GLOSSARY OF TERMS

1
INTRODUCTION

The Local Government Pension Scheme Regulations 2013 (as amended) (“the 2013 Regulations”) and the Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014 (“the 2014 Transitional Regulations”) (collectively; “the Regulations”) provide the statutory framework from which the Administering Authority is required to prepare a Funding Strategy Statement (FSS). The key requirements for preparing the FSS can be summarised as follows:

- After consultation with all relevant interested parties involved with the Worcestershire County Council Pension Fund (the “Fund”), the Administering Authority will prepare and publish their funding strategy;
- In preparing the FSS, the Administering Authority must have regard to:
  - the guidance issued by CIPFA for this purpose; and
  - the Investment Strategy Statement (ISS) for the Fund published under Regulation 12 of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 (as amended);
- The FSS must be revised and published whenever there is a material change in either the policy set out in the FSS or the ISS.

BENEFITS

The benefits provided by the Fund are specified in the governing legislation contained in the Regulations referred to above. Benefits payable under the Fund are guaranteed by statute and thereby the pensions promise is secure for members. The FSS addresses the issue of managing the need to fund those benefits over the long term, whilst at the same time facilitating scrutiny and accountability through improved transparency and disclosure.

The Fund is a defined benefit arrangement with principally final salary related benefits from contributing members up to 1 April 2014 and Career Averaged Revalued Earnings (“CARE”) benefits earned thereafter. There is also a “50:50 Scheme Option”, where members can elect to accrue 50% of the full Fund benefits in relation to the member only and pay 50% of the normal member contribution.

EMPLOYER CONTRIBUTIONS

The required levels of employee contributions are specified in the Regulations. Employer contributions are determined in accordance with the Regulations (which require that an actuarial valuation is completed every three years by the actuary, including a rates and adjustments certificate specifying the “primary” and “secondary” rate of the employer’s contribution).

PRIMARY RATE

The “Primary rate” for an employer is the contribution rate required to meet the cost of the future accrual of benefits, ignoring any past service surplus or deficit, but allowing for any employer-specific circumstances, such as its membership profile, the funding strategy adopted for that employer, the actuarial method used and/or the employer’s covenant.

The Primary rate for the whole fund is the weighted average (by payroll) of the individual employers' Primary rates.

SECONDARY RATE

The "Secondary rate" is an adjustment to the Primary rate to arrive at the total rate of contribution each employer is required to pay.   The Secondary rate may be expressed as a percentage adjustment to the Primary rate, and/or a cash adjustment in each of the three years beginning 1 April in the year following the actuarial valuation.

Secondary rates for the whole fund in each of the three years shall also be disclosed. These will be the calculated weighted average based on the whole fund payroll in respect of percentage rates and the total amount in respect of cash adjustments.

2 PURPOSE OF FSS IN POLICY TERMS

Funding is the making of advance provision to meet the cost of accruing benefit promises. Decisions taken regarding the approach to funding will therefore determine the rate or pace at which this advance provision is made. Although the Regulations specify the fundamental principles on which funding contributions should be assessed, implementation of the funding strategy is the responsibility of the Administering Authority, acting on the professional advice provided by the actuary.

The Administering Authority's long term objective is for the Fund to achieve a 100% solvency level over a reasonable time period and then maintain sufficient assets in order for it to pay all benefits arising as they fall due.

The purpose of this Funding Strategy Statement is therefore:

- to establish a clear and transparent fund-specific strategy which will identify how employers' pension liabilities are best met going forward by taking a prudent longer-term view of funding those liabilities;
- to establish contributions at a level to "secure the solvency" of the pension fund and the "long term cost efficiency",
- to have regard to the desirability of maintaining as nearly constant a primary rate of contribution as possible.

The intention is for this strategy to be both cohesive and comprehensive for the Fund as a whole, recognising that there will be conflicting objectives which need to be balanced and reconciled. Whilst the position of individual employers must be reflected in the statement, it must remain a single strategy for the Administering Authority to implement and maintain.

3 AIMS AND PURPOSE OF THE FUND

THE AIMS OF THE FUND ARE TO:

- manage employers' liabilities effectively and ensure that sufficient resources are available to meet all liabilities as they fall due
- enable employer contribution rates to be kept at a reasonable and affordable cost to the taxpayers, scheduled, resolution and admitted bodies, while achieving and maintaining fund solvency and long term cost efficiency, which should be assessed in light of the profile of the Fund now and in the future due to sector changes
- maximise the returns from investments within reasonable risk parameters taking into account the above aims.

THE PURPOSE OF THE FUND IS TO:

- receive monies in respect of contributions, transfer values and investment income, and
- pay out monies in respect of Fund benefits, transfer values, costs, charges and expenses as defined in the 2013 Regulations, the 2014 Transitional Regulations and the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016.

4
RESPONSIBILITIES OF THE KEY PARTIES

The efficient and effective management of the Fund can only be achieved if all parties exercise their statutory duties and responsibilities conscientiously and diligently. The key parties for the purposes of the FSS are the Administering Authority (and, in particular the Pensions Committee, the individual employers and the Fund Actuary and details of their roles are set out below. Other parties required to play their part in the fund management process are bankers, custodians, investment managers, auditors and legal, investment and governance advisors, along with the Local Pensions Board created under the Public Service Pensions Act 2013.

KEY PARTIES TO THE FSS

The **Administering Authority** should:

- operate the pension fund
- collect employer and employee contributions, investment income and other amounts due to the pension fund as stipulated in the Regulations
- pay from the pension fund the relevant entitlements as stipulated in the Regulations
- invest surplus monies in accordance the Regulations
- ensure that cash is available to meet liabilities as and when they fall due
- take measures as set out in the Regulations to safeguard the fund against the consequences of employer default
- manage the valuation process in consultation with the Fund's actuary
- prepare and maintain a FSS and an ISS, both after proper consultation with interested parties, and
- monitor all aspects of the Fund's performance and funding, amending the FSS/ISS as necessary
- effectively manage any potential conflicts of interest arising from its dual role as both fund administrator and a Fund employer, and
- establish, support and monitor a Local Pension Board (LPB) as required by the Public Service Pensions Act 2013, the Regulations and the Pensions Regulator's relevant Code of Practice.

The **Individual Employer** should:

- deduct contributions from employees' pay correctly after determining the appropriate employee contribution rate (in accordance with the Regulations)
- pay all contributions, including their own as determined by the actuary, promptly by the due date
- develop a policy on certain discretions and exercise those discretions as permitted within the regulatory framework
- make additional contributions in accordance with agreed arrangements in respect of, for example, augmentation of Fund benefits, early retirement strain, and
- have regard to the Pensions Regulator's focus on data quality and comply with any requirement set by the Administering Authority in this context, and
- notify the Administering Authority promptly of any changes to membership which may affect future funding.

The **Fund Actuary** should:

- prepare valuations including the setting of employers' contribution rates at a level to ensure fund solvency after agreeing assumptions with the Administering Authority and having regard to their FSS and the Regulations
- prepare advice and calculations in connection with bulk transfers and individual benefit-related matters such as pension strain costs, ill health retirement costs etc
- provide advice and valuations on the termination of admission agreements
- provide advice to the Administering Authority on bonds and other forms of security against the financial effect on the Fund of employer default
- assist the Administering Authority in assessing whether employer contributions need to be revised between valuations as required by the Regulations
- advise on funding strategy, the preparation of the FSS and the inter-relationship between the FSS and the ISS, and
- ensure the Administering Authority is aware of any professional guidance or other professional requirements which may be of relevance to the Fund Actuary's role in advising the Fund.

5 SOLVENCY FUNDING TARGET

Securing the “solvency” and “long term cost efficiency” is a regulatory requirement. To meet these requirements the Administering Authority’s long term funding objective is for the Fund to achieve and then maintain sufficient assets to cover 100% of projected accrued liabilities (the “funding target”) assessed on an ongoing past service basis including allowance for projected final pay where appropriate. In the long term, an employer’s total contribution rate would ultimately revert to its Primary rate of contribution.

SOLVENCY AND LONG TERM EFFICIENCY

Each employer’s contributions are set at such a level to achieve full solvency in a reasonable timeframe. Solvency is defined as a level where the Fund’s liabilities i.e. benefit payments can be reasonably met as they arise.

Employer contributions are also set in order to achieve long term cost efficiency. Long term cost-efficiency implies that contributions must not be set at a level that is likely to give rise to additional costs in the future. For example, deferring costs to the future would be likely to result in those costs being greater overall than if they were provided for at the appropriate time.

When formulating the funding strategy the Administering Authority has taken into account these key objectives and also considered the implications of the requirements under Section 13(4)(c) of the Public Service Pensions Act 2013. As part of these requirements the Government Actuary’s Department (GAD) must, following an actuarial valuation, report on whether the rate of employer contributions to the Fund is set at an appropriate level to ensure the “solvency” of the pension fund and “long term cost efficiency" of the LGPS so far as relating to the Fund.

DETERMINATION OF THE SOLVENCY FUNDING TARGET AND DEFICIT RECOVERY PLAN

The principal method and assumptions to be used in the calculation of the funding target are set out in **Appendix A**. The Employer Deficit Recovery Plans are set out in **Appendix B**.

Underlying these assumptions are the following two tenets:

- that the Fund is expected to continue for the foreseeable future; and
- favourable investment performance can play a valuable role in achieving adequate funding over the longer term.

This allows the Fund to take a longer term view when assessing the contribution requirements for certain employers.

In considering this the Administering Authority, based on the advice of the Actuary, will consider if this results in a reasonable likelihood that the funding plan will be successful potentially taking into account any changes in funding after the valuation date up to the finalisation of the valuation by 31 March 2017 at the latest.

As part of each valuation separate employer contribution rates are assessed by the Fund Actuary for each participating employer or group of employers. These rates are assessed taking into account the experience and circumstances of each employer, following a principle of no cross-subsidy between the distinct employers and employer groups in the Fund.

The Administering Authority, following consultation with the participating employers, has adopted the following objectives for setting the individual employer contribution rates arising from the 2016 actuarial valuation:

- The Fund does not believe it appropriate for deficit contribution reductions to apply compared to the existing funding plan (allowing for indexation where applicable) where deficits remain unless there is compelling reason to do so.

- Subject to consideration of affordability, as a general rule the deficit recovery period will reduce by at least 3 years for employers at this valuation when compared to the preceding valuation. This is to target full solvency over a similar (or shorter) time horizon. Employers will have the freedom to adopt a recovery plan on the basis of a shorter period if they so wish. Subject to affordability considerations and other factors, a bespoke period may be applied in respect of particular employers where the Administering Authority considers this to be warranted (see Deficit Recovery Plan in Appendix B). These principles have resulted in a target recovery period of 18 years being adopted for most Fund employers.

- Individual employer contributions will be expressed and certified as two separate elements:
    - the **Primary rate**: a percentage of pensionable payroll in respect of the cost of the future accrual of benefits
    - the **Secondary rate**: a schedule of lump sum monetary amounts over 2017/20 in respect of an employer's surplus or deficit

    For any employer, the total contributions they are actually required to pay in any one year is the sum of the Primary and Secondary rates (subject to an overall minimum of zero). Both elements are subject to further review from April 2020 based on the results of the 2019 actuarial valuation.

- Where increases (or decreases) in employer contributions are required from 1 April 2017, following completion of the 2016 actuarial valuation, at the sole discretion of the Administering Authority the increase (or decrease) from the rates of contribution payable in the year 2017/18 may be implemented in steps, over a maximum period of 3 years.

- On the cessation of an employer's participation in the Fund, in accordance with the Regulations, the Fund Actuary will be asked to make a termination assessment. Any deficit in the Fund in respect of the employer will be due to the Fund as a termination contribution, unless it is agreed by the Administering Authority and the other parties involved that the assets and liabilities relating to the employer will transfer within the Fund to another participating employer. The termination policy is set out in Appendix C.

- In all cases the Administering Authority reserves the right to apply a different approach at its sole discretion, taking into account the risk associated with an employer in proportion to the Fund as a whole. Any employer affected will be notified separately.

FUNDING FOR NON-ILL HEALTH EARLY RETIREMENT COSTS

Employers are required to meet all costs of early retirement strain by immediate capital payments into the Fund, or in certain circumstances by agreement with the Fund, through instalments over a period not exceeding 3 years or if less the remaining period of the body’s membership of the Fund.

6
LINK TO INVESTMENT POLICY AND THE INVESTMENT STRATEGY STATEMENT (ISS)

The results of the 2016 valuation show the liabilities to be 76% covered by the current assets, with the funding deficit of 24% being covered by future deficit contributions.

In assessing the value of the Fund's liabilities in the valuation, allowance has been made for growth asset out-performance as described below, taking into account the investment strategy adopted by the Fund, as set out in the ISS.

It is not possible to construct a portfolio of investments which produces a stream of income exactly matching the expected liability outgo. However, it is possible to construct a portfolio which represents the "minimum risk" investment position which would deliver a very high certainty of real returns above assumed CPI inflation. Such a portfolio would consist of a mixture of long-term index-linked, fixed interest gilts and possible swaps.

Investment of the Fund's assets in line with this portfolio would minimise fluctuations in the Fund's funding position between successive actuarial valuations.

If, at the valuation date, the Fund had been invested in this portfolio, then in carrying out this valuation it would not be appropriate to make any allowance for growth assets out-performance or any adjustment to market implied inflation assumption due to supply/demand distortions in the bond markets. This would result in a real return versus CPI inflation of nil per annum at the valuation date. On this basis of assessment, the assessed value of the Fund's liabilities at the valuation would have been significantly higher, resulting in a funding level of [51%] (TBC).

Departure from a minimum risk investment strategy, in particular to include growth assets such as equities, gives a better prospect that the assets will, over time, deliver returns in excess of CPI inflation and reduce the contribution requirements. The target solvency position of having sufficient assets to meet the Fund's pension obligations might in practice therefore be achieved by a range of combinations of funding plan, investment strategy and investment performance.

The current strategy is:

	%
Shares Managed Actively:	
Far East Developed	12.0
Emerging Markets	12.0
Shares Managed Passively:	
Market Capitalisation Indices	
United Kingdom	25.5
North America	11.0
Europe ex - UK	9.5
Alternative Indices	
Global	10.0
Bonds Managed Actively	10.0
Property / Infrastructure	10.0

The investment strategy set out above equate to an overall best estimate average expected return of around 3.7% per annum in excess of CPI inflation at the valuation date. For the purposes of setting funding strategy however, the Administering Authority believes that it is appropriate to take a margin for prudence on these return expectations.

7 IDENTIFICATION OF RISKS AND COUNTER-MEASURES

The funding of defined benefits is by its nature uncertain. Funding of the Fund is based on both financial and demographic assumptions. These assumptions are specified in the actuarial valuation report. When actual experience is not in line with the assumptions adopted a surplus or shortfall will emerge at the next actuarial assessment and will require a subsequent contribution adjustment to bring the funding back into line with the target.

The Administering Authority has been advised by the Fund Actuary that the greatest risk to the funding level is the investment risk inherent in the predominantly equity based strategy, so that actual asset out-performance between successive valuations could diverge significantly from that assumed in the long term.

FINANCIAL

The financial risks are as follows:-

- Investment markets fail to perform in line with expectations
- Market outlook moves at variance with assumptions
- Investment Fund Managers fail to achieve performance targets over the longer term
- Asset re-allocations in volatile markets may lock in past losses
- Pay and price inflation significantly more or less than anticipated
- Future underperformance arising as a result of participating in the larger asset pooling vehicle.

Any increase in employer contribution rates (as a result of these risks) may in turn impact on the service delivery of that employer and their financial position.

In practice the extent to which these risks can be reduced is limited. However, the Fund's asset allocation is kept under constant review and the performance of the investment managers is regularly monitored.

DEMOGRAPHIC

The demographic risks are as follows:-

- Longevity horizon continues to expand
- Deteriorating pattern of early retirements (including those granted on the grounds of ill health)
- Unanticipated acceleration of the maturing of the Fund resulting in materially negative cashflows and shortening of liability durations
- The level of take-up of the 50:50 option at a higher or lower level than built into the actuarial assumptions.

Increasing longevity is something which government policies, both national and local, are designed to promote. It does, however, result in a greater liability for pension funds.

Whilst regulatory procedures are in place to ensure that ill-health retirements are properly controlled, employing bodies also need to recognise that unforeseen costs for them will arise in the event that the number of ill-health retirements were to exceed the assumptions made. Early retirements for reasons of redundancy and efficiency do not affect the solvency of the Fund because they are the subject of a direct charge.

With regards to increasing maturity (e.g. due to further cuts in workforce and/or restrictions on new employees accessing the Fund), the Administering Authority regularly monitors the Fund’s cashflow requirements and considers the impact on the investment strategy.

INSURANCE OF CERTAIN BENEFITS

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

REGULATORY

The key regulatory risks are as follows:-

- Changes to Regulations, e.g. changes to the benefits package, retirement age, potential new entrants to Fund,
- Changes to national pension requirements and/or HMRC Rules

Membership of the LGPS is open to all local government staff and should be encouraged as a valuable part of the contract of employment. However, increasing membership does result in higher employer monetary costs.

GOVERNANCE

The Fund has done as much as it believes it reasonably can to enable employing bodies and Fund members (via their representatives on the Local Pension Board) to make their views known to the Fund and to participate in the decision-making process.

Governance risks are as follows:-

- The quality of membership data deteriorates materially due to breakdown in processes for updating the information resulting in liabilities being under or overstated
- Administering Authority unaware of structural changes in employer’s membership (e.g. large fall in employee numbers, large number of retirements) with the result that contribution rates are set at too low a level
- Administering Authority not advised of an employer closing to new entrants, something which would normally require an increase in contribution rates
- An employer ceasing to exist with insufficient funding or adequacy of a bond
- Changes in the Committee membership.

For these risks to be minimised much depends on information being supplied to the Administering Authority by the employing bodies. Arrangements are strictly controlled and monitored, but in most cases the employer, rather than the Fund as a whole, bears the risk.

8
MONITORING AND REVIEW

The Administering Authority has taken advice from the actuary in preparing this Statement, and has consulted with the employers participating in the Fund.

A full review of this Statement will occur no less frequently than every three years, to coincide with completion of a full actuarial valuation. Any review will take account of the current economic conditions and will also reflect any legislative changes.

The Administering Authority will monitor the progress of the funding strategy between full actuarial valuations. If considered appropriate, the funding strategy will be reviewed (other than as part of the triennial valuation process), for example, if there:

- has been a significant change in market conditions, and/or deviation in the progress of the funding strategy
- have been significant changes to the Fund membership, or LGPS benefits
- have been changes to the circumstances of any of the employing authorities to such an extent that they impact on or warrant a change in the funding strategy
- have been any significant special contributions paid into the Fund.

When monitoring the funding strategy, if the Administering Authority considers that any action is required, the relevant employing authorities will be contacted. In the case of admitted bodies, there is statutory provision for rates to be amended between valuations but it is unlikely that this power will be invoked other than in exceptional circumstances.

APPENDIX A

ACTUARIAL METHOD AND ASSUMPTIONS

METHOD

The actuarial method to be used in the calculation of the solvency funding target is the Projected Unit method, under which the salary increases assumed for each member are projected until that member is assumed to leave active service by death, retirement or withdrawal from service. This method implicitly allows for new entrants to the Fund on the basis that the overall age profile of the active membership will remain stable. As a result, for those employers which are closed to new entrants, alternative methods are adopted, which make advance allowance for the anticipated future ageing and decline of the current closed membership group potentially over the period of the rates and adjustments certificate.

FINANCIAL ASSUMPTIONS – SOLVENCY FUNDING TARGET

Investment return (discount rate)

The discount rate has been derived based on the expected return on the Fund assets based on the long term strategy set out in the Investment Strategy Statement (ISS). It includes appropriate margins for prudence. When assessing the appropriate discount rate consideration has been given to the returns in excess of CPI inflation (as derived below). The discount rate at the valuation has been derived based on an assumed return of 2.15% per annum above CPI inflation, i.e. a total discount rate of 4.35% per annum. This real return will be reviewed from time to time based on the investment strategy, market outlook and the Fund's overall risk metrics.

Inflation (Consumer Prices Index)

The inflation assumption will be taken to be the investment market's expectation for RPI inflation as indicated by the difference between yields derived from market instruments, principally conventional and index-linked UK Government gilts as at the valuation date, reflecting the profile and duration of the Fund's accrued liabilities, but subject to the following two adjustments:

- an allowance for supply/demand distortions in the bond market is incorporated, and
- an adjustment due to retirement pensions being increased annually by the change in the Consumer Price Index rather than the Retail Price Index

The overall reduction to RPI inflation at the valuation date is 1.0% per annum.

Salary increases

In relation to benefits earned prior to 1 April 2014, the assumption for real salary increases (salary increases in excess of price inflation) will be determined by an allowance of 1.5% p.a. over the inflation assumption as described above. This includes allowance for promotional increases. In addition to the long term salary increase assumption allowance has been made for expected short term pay restraint for some employers as budgeted in their financial plan. For example for public sector employers this results in a total salary increase of 1.0% per annum to 2019/20 in line with Government policy.

Pension increases/Indexation of CARE benefits

Increases to pensions are assumed to be in line with the inflation (CPI) assumption described above. This is modified appropriately to reflect any benefits which are not fully indexed in line with the CPI (e.g. some Guaranteed Minimum Pensions where the LGPS is not currently required to provide full indexation).

DEMOGRAPHIC ASSUMPTIONS

Mortality/Life Expectancy

The mortality in retirement assumptions will be based on the most up-to-date information in relation to self-administered pension schemes published by the Continuous Mortality Investigation (CMI), making allowance for future improvements in longevity. The mortality tables used are set out below, with a loading reflecting LGPS experience. The derivation of the mortality assumption is set out in a separate paper as supplied by the Actuary. Current members who retire on the grounds of ill health are assumed to exhibit average mortality equivalent to that for a good health retiree at an age 4 years older whereas for existing ill health retirees we assume this is at an age 3 years older. For all members, it is assumed that the accelerated trend in longevity seen in recent years will continue in the longer term and as such, the assumptions build in a minimum level of longevity ‘improvement’ year on year in the future in line with the CMI projections subject to a minimum rate of improvement of 1.5% per annum.

The mortality before retirement has also been adjusted based on LGPS wide experience.

Commutation

It has been assumed that, on average, 50% of retiring members will take the maximum tax-free cash available at retirement and 50% will take the standard 3/80ths cash sum. The option which members have to commute part of their pension at retirement in return for a lump sum is a rate of £12 cash for each £1 p.a. of pension given up.

Other Demographics

Following an analysis of Fund experience carried out by the Actuary, the proportions married/civil partnership assumption has been modified from the last valuation. No allowance will be made for the future take-up of the 50:50 option. Where any member has actually opted for the 50:50 scheme, this will be allowed for in the assessment of the rate for the next 3 years. Other assumptions are as per the last valuation.

Expenses

Expenses are met out the Fund, in accordance with the Regulations. This is allowed for by adding 0.4% of pensionable pay to the contributions as required from participating employers. This addition is reassessed at each valuation. Investment expenses have been allowed for implicitly in determining the discount rates.

Discretionary Benefits

The costs of any discretion exercised by an employer in order to enhance benefits for a member through the Fund will be subject to additional contributions from the employer as required by the Regulations as and when the event occurs. As a result, no allowance for such discretionary benefits has been made in the valuation

METHOD AND ASSUMPTIONS USED IN CALCULATING THE COST OF FUTURE ACCRUAL (OR PRIMARY RATE)

The future service liabilities are calculated using the same assumptions as the funding target except that a different financial assumption for the discount rate is used. A critical aspect here is that the Regulations state the desirability of keeping the “Primary Rate” (which is the future service rate) as stable as possible so this needs to be taken into account when setting the assumptions.

As future service contributions are paid in respect of benefits built up in the future, the Primary Rate should take account of the market conditions applying at future dates, not just the date of the valuation and a slightly higher expected return from the investment strategy has been assumed. In addition the future liabilities for which these contributions will be paid have a longer average duration than the past service liabilities as they relate to active members only.

The financial assumptions in relation to future service (i.e. the normal cost) are not specifically linked to investment conditions as at the valuation date itself, and are based on an overall assumed real discount rate of 2.75% per annum above the long term average assumption for consumer price inflation of 2.2% per annum.

EMPLOYER ASSET SHARES

The Fund is a multi-employer pension Fund that is not formally unitised and so individual employer asset shares are calculated at each actuarial valuation. This means it is necessary to make some approximations in the timing of cashflows and allocation of investment returns when deriving the employer asset share.

In attributing the overall investment performance obtained on the assets of the Fund to each employer a pro-rata principle is adopted. This approach is effectively one of applying a notional individual employer investment strategy identical to that adopted for the Fund as a whole unless agreed otherwise between the employer and the Fund at the sole discretion of the Administering Authority.

At each review, cashflows into and out of the Fund relating to each employer, any movement of members between employers within the Fund, along with investment return earned on the asset share, are allowed for when calculating asset shares at each valuation.

Other adjustments are also made on account of the funding positions of orphan bodies which fall to be met by all other active employers in the Fund.

SUMMARY OF KEY WHOLE FUND ASSUMPTIONS USED FOR CALCULATING FUNDING TARGET AND COST OF FUTURE ACCRUAL (THE "PRIMARY RATE") FOR THE 2016 ACTUARIAL VALUATION

Long-term yields	
Market implied RPI inflation	3.2% p.a.
Solvency Funding Target financial assumptions	
Investment return/Discount Rate	4.35% p.a.
CPI price inflation	2.2% p.a.
Long Term Salary increases	3.7% p.a.
Pension increases/indexation of CARE benefits	2.2% p.a.
Future service accrual financial assumptions	
Investment return/Discount Rate	4.95% p.a.
CPI price inflation	2.2% p.a.
Long Term Salary increases	3.7% p.a.
Pension increases/indexation of CARE benefits	2.2% p.a.

Life expectancy assumptions

The post retirement mortality tables adopted for this valuation are set out below:

		Base Table	Improvements	Adjustment (M / F)
Current pensioners	Normal health	S2PA	CMI_2015 [1.5%]	99% / 89%
	Ill-health	S2PA	CMI_2015 [1.5%]	Normal health + 3 years
	Dependants	S2PMA / S2DFA	CMI_2015 [1.5%]	123% / 104%
	Future dependants	S2PMA / S2DFA	CMI_2015 [1.5%]	116% / 111%
Current active / deferred	Active normal health	S2PA	CMI_2015 [1.5%]	99% / 89%
	Active ill-health	S2PA	CMI_2015 [1.5%]	Normal health + 4 years
	Deferred	S2PA	CMI_2015 [1.5%]	99% / 89%
	Future dependants	S2PMA / S2DFA	CMI_2015 [1.5%]	116% / 111%

Other demographic assumptions are set out in the Actuary's formal report.

APPENDIX B

EMPLOYER DEFICIT RECOVERY PLANS

As the assets of the Fund are less than the liabilities at the effective date, a deficit recovery plan needs to be adopted such that additional contributions are paid into the Fund to meet the shortfall.

Deficit contributions paid to the Fund by each employer will be expressed as £s amounts and it is the Fund's objective that any funding deficit is eliminated as quickly as the participating employers can reasonably afford based on the Administering Authority's view of the employer's covenant and risk to the Fund.

Recovery periods will be set by the Fund on a consistent basis across employer categories where possible and communicated as part of the discussions with employers. This will determine the minimum contribution requirement and employers will be free to select any shorter deficit recovery period and higher contributions if they wish, including the option of prepaying the deficit contributions in one lump sum either on annual basis or a one-off payment. This will be reflected in the monetary amount requested via a reduction in overall £ deficit contributions payable.

The determination of the recovery periods is summarised in the table below:

Category	Default Deficit Recovery Period	Derivation
Fund Employers	18 years	Determined by reducing the period from the preceding valuation by at least 3 years and to ensure deficit contributions do not reduce versus those expected from the existing recovery plan.
Open Admitted Bodies	18 years	Determined by reducing the period from the preceding valuation by at least 3 years and to ensure deficit contributions do not reduce versus those expected from the existing recovery plan.
Closed Employers	Lower of 18 years and the future working lifetime of the membership	Determined by reducing the period from the preceding valuation by at least 3 years and to ensure deficit contributions do not reduce versus those expected from the existing recovery plan.
Employers with a limited participation in the Fund	Determined on a case by case basis	Length of expected period of participation in the Fund

In determining the actual recovery period to apply for any particular employer or employer grouping, the Administering Authority may take into account some or all of the following factors:

- The size of the funding shortfall;
- The business plans of the employer;
- The assessment of the financial covenant of the Employer, and security of future income streams;

- Any contingent security available to the Fund or offered by the Employer such as guarantor or bond arrangements, charge over assets, etc.

The objective is to recover any deficit over a reasonable timeframe, and this will be periodically reviewed. Subject to affordability considerations a key principle will be to maintain the deficit contributions at the expected monetary levels from the preceding valuation (allowing for any indexation in these monetary payments over the recovery period).

OTHER FACTORS AFFECTING THE EMPLOYER DEFICIT RECOVERY PLANS

As part of the process of agreeing funding plans with individual employers, the Administering Authority will consider the use of contingent assets and other tools such as bonds or guarantees that could assist employing bodies in managing the cost of their liabilities or could provide the Fund with greater security against outstanding liabilities. All other things equal this could result in a longer recovery period being acceptable to the Administering Authority, although employers will still be expected to at least cover expected interest costs on the deficit.

It is acknowledged by the Administering Authority that, whilst posing a relatively low risk to the Fund as a whole, a number of smaller employers may be faced with significant contribution increases that could seriously affect their ability to function in the future. The Administering Authority therefore may in some cases be willing to use its discretion to accept an evidence based affordable level of contributions for such organisations for the three years 2017/2020. Any application of this option is at the ultimate discretion of the Fund officers and Section 151 officer in order to effectively manage risk across the Fund. It will only be considered after the provision of the appropriate evidence as part of the covenant assessment and also the appropriate professional advice.

For those bodies identified as having a weaker covenant, the Administering Authority will need to balance the level of risk plus the solvency requirements of the Fund with the sustainability of the organisation when agreeing funding plans. As a minimum, the annual deficit payment must meet the on-going interest costs to ensure, everything else being equal, that the deficit does not increase in monetary terms.

Notwithstanding the above, the Administering Authority, in consultation with the actuary, has also had to consider whether any exceptional arrangements should apply in particular cases.

APPENDIX C

ADMISSION AND TERMINATION POLICY

INTRODUCTION

This document details the Worcestershire County Council Pension Fund's (WCCPF) policy on the methodology for assessment of ongoing contribution requirements and termination payments in the event of the cessation of an employer's participation in the Fund. This document also covers WCCPF's policy on admissions into the Fund and sets out the considerations for current and former admission bodies. It supplements the general policy of the Fund as set out in the Funding Strategy Statement (FSS).

- Admission bodies are required to have an "admission agreement" with the Fund. In conjunction with the Regulations, the admission agreement sets out the conditions of participation of the admission body including which employees (or categories of employees) are eligible to be members of the Fund.

- Scheme Employers have a statutory right to participate in the LGPS and their staff therefore can become members of the LGPS at any time, although some organisations (Part 2 Scheme Employers) do need to designate eligibility for its staff.

A list of all current employing bodies participating in the WCCPF is kept as a live document and will be updated by the Administering Authority as bodies are admitted to, or leave the WCCPF.

Please see the glossary for an explanation of the terms used throughout this Appendix.

ENTRY TO THE FUND

Prior to admission to the Fund, an Admitted Body is required to carry out an assessment of the level of risk on premature termination of the contract to the satisfaction of the Administering Authority. If the risk assessment and/or bond amount is not to the satisfaction of the Administering Authority (as required under the LGPS Regulations) it will consider and determine whether the admission body must pre-fund for termination with contribution requirements assessed using the minimum risk methodology and assumptions.

Some aspects that the Administering Authority may consider when deciding whether to apply a minimum risk methodology are:

- Uncertainty over the security of the organisation's funding sources e.g. the body relies on voluntary or charitable sources of income or has no external funding guarantee/reserves;

- If the admitted body has an expected limited lifespan of participation in the Fund;

- The average age of employees to be admitted and whether the admission is closed to new joiners.

In order to protect other Fund employers, where it has been considered undesirable to provide a bond, a guarantee must be sought in line with the LGPS Regulations.

ADMITTED BODIES PROVIDING A SERVICE

Generally Admitted Bodies providing a service will have a guarantor within the Fund that will stand behind the liabilities. Accordingly, in general, the minimum risk approach to funding and termination will not apply for these bodies.

As above, the Admitted Body is required to carry out an assessment of the level of risk on premature termination of the contract to the satisfaction of the Administering Authority. This assessment would normally be based on advice in the form of a “risk assessment report” provided by the actuary to the WCCPF. As the Scheme Employer is effectively the ultimate guarantor for these admissions to the WCCPF it must also be satisfied (along with the Administering Authority) over the level (if any) of any bond requirement. Where bond agreements are to the satisfaction of the Administering Authority, the level of the bond amount will be subject to review on a regular basis.

In the absence of any other specific agreement between the parties, deficit recovery periods for Admitted Bodies will be set in line with the Fund’s general policy as set out in the FSS.

Any risk sharing arrangements agreed between the Scheme Employer and the Admitted Body will be documented in the commercial agreement between the two parties and not the admission agreement.

In the event of termination of the Admitted Body, any orphan liabilities in the Fund will be subsumed by the relevant Scheme Employer.

An exception to the above policy applies if the guarantor is not a participating employer within the WCCPF, including if the guarantor is a participating employer within another LGPS Fund. In order to protect other employers within the WCCPF the Administering Authority may in this case treat the admission body as pre-funding for termination, with contribution requirements assessed using the minimum risk methodology and assumptions

PRE-FUNDING FOR TERMINATION

An employing body may choose to pre-fund for termination i.e. to amend their funding approach to a minimum risk methodology and assumptions. This will substantially reduce the risk of an uncertain and potentially large debt being due to the Fund at termination. However, it is also likely to give rise to a substantial increase in contribution requirements, when assessed on the minimum risk basis.

For any employing bodies funding on such a minimum risk strategy a notional investment strategy will be assumed as a match to the liabilities. In particular the employing body’s notional asset share of the Fund will be credited with an investment return in line with the minimum risk funding assumptions adopted rather than the actual investment return generated by the actual asset portfolio of the entire Fund. The Fund reserves the right to modify this approach in any case where it might materially affect the finances of the Scheme, or depending on any case specific circumstances.

EXITING THE FUND

TERMINATION OF AN EMPLOYER'S PARTICIPATION

When an employing body terminates for any reason, employees may transfer to another employer, either within the Fund or elsewhere. If this is not the case the employees will retain pension rights within the Fund i.e. either deferred benefits or immediate retirement benefits.

In addition to any liabilities for current employees the Fund will also retain liability for payment of benefits to former employees, i.e. to existing deferred and pensioner members except where there is a complete transfer of responsibility to another Fund with a different Administering Authority.

In the event that unfunded liabilities arise that cannot be recovered from the employing body, these will normally fall to be met by the Fund as a whole (i.e. all employers) unless there is a guarantor or successor body within the Fund.

The WCCPF's policy is that a termination assessment will be made based on a minimum risk funding basis, unless the employing body has a guarantor within the Fund or a successor body exists to take over the employing body's liabilities (including those for former employees). This is to protect the other employers in the Fund as, at termination, the employing body's liabilities will become orphan liabilities within the Fund, and there will be no recourse to it if a shortfall emerges in the future (after participation has terminated).

If, instead, the employing body has a guarantor within the Fund or a successor body exists to take over the employing body's liabilities, the WCCPF's policy is that the valuation funding basis will be used for the termination assessment unless the guarantor informs the WCCPF otherwise. The guarantor or successor body will then, following any termination payment made, subsume the assets and liabilities of the employing body within the Fund. (For Admission Bodies, this process is sometimes known as the "novation" of the admission agreement.) This may, if agreed by the successor body, constitute a complete amalgamation of assets and liabilities to the successor body, including any funding deficit on closure. In these circumstances no termination payment will be required from the outgoing employing body itself, as the deficit would be recovered via the successor body's own deficit recovery plan.

It is possible under certain circumstances that an employer can apply to transfer all assets and current and former members' benefits to another LGPS Fund in England and Wales. In these cases no termination assessment is required as there will no longer be any orphan liabilities in the WCCPF. Therefore, a separate assessment of the assets to be transferred will be required.

FUTURE TERMINATIONS

In many cases, termination of an employer's participation is an event that can be foreseen, for example, because the organisation's operations may be planned to be discontinued and/or the admission agreement is due to cease. Under the Regulations, in the event of the Administering Authority becoming aware of such circumstances, it can amend an employer's minimum contributions such that the value of the assets of the employing body is neither materially more nor materially less than its anticipated liabilities at the date it appears to the Administering Authority that it will cease to be a participating employer. In this case, employing bodies are encouraged to open a dialogue with the Fund to commence planning for the termination as early as possible. Where termination is disclosed in advance the Fund will operate procedures to reduce the sizeable volatility risks to the debt amount in the run up to actual termination of participation. The Fund will modify the employing body's approach in any case, where it might materially affect the finances of the Scheme, or depending on any case specific circumstances.

The Fund's standard policy is to recover termination deficits (including interest and expenses) as a one off payment. However, at the discretion of the Administering Authority, the deficit can be recovered over an agreed period as certified by the Actuary. This period will depend on the Administering Authority's view on the covenant of the outgoing employer.

MINIMUM RISK TERMINATION BASIS

The minimum risk financial assumptions that applied at the actuarial valuation date (31 March 2016) are set out below in relation to any liability remaining in the Fund. These will be updated on a case-by-case basis, with reference to prevailing market conditions at the relevant employing body's cessation date.

Least risk assumptions	**31 March 2016**
Discount Rate	2.2% p.a.
CPI price inflation	2.2% p.a.
Pension increases/indexation of CARE benefits	2.2% p.a.

All demographic assumptions will be the same as those adopted for the 2016 actuarial valuation, except in relation to the life expectancy assumption. Given the minimum risk financial assumptions do not protect against future adverse demographic experience a higher level of prudence will be adopted in the life expectancy assumption.

The termination basis for an outgoing employer will include an adjustment to the assumption for longevity improvements over time by increasing the rate of improvement in mortality rates to 2% p.a. from 1.5% used in the 2016 valuation for ongoing funding and contribution purposes.

APPENDIX D

COVENANT ASSESSMENT AND MONITORING POLICY

An employer's covenant underpins its legal obligation and ability to meet its financial responsibilities now and in the future. The strength of covenant depends upon the robustness of the legal agreements in place and the likelihood that the employer can meet them. The covenant effectively underwrites the risks to which the Fund is exposed, including underfunding, longevity, investment and market forces.

An assessment of employer covenant focuses on determining the following:

> Type of body and its origins
> Nature and enforceability of legal agreements
> Whether there is a bond in place and the level of the bond
> Whether a more accelerated recovery plan should be enforced
> Whether there is an option to call in contingent assets
> Is there a need for monitoring of ongoing and termination funding ahead of the next actuarial valuation?

The strength of employer covenant can be subject to substantial variation over relatively short periods of time and, as such, regular monitoring and assessment is vital.

RISK CRITERIA

The assessment criteria upon which an employer should be reviewed could include:

- Nature and prospects of the employer's industry
- Employer's competitive position and relative size
- Management ability and track record
- Financial policy of the employer
- Profitability, cashflow and financial flexibility
- Employer's credit rating
- Position of the economy as a whole

Not all of the above would be applicable to assessing employer risk within the Fund; rather a proportionate approach to consideration of the above criteria would be made, with further consideration given to the following:

- The scale of obligations to the pension scheme relative to the size of the employer's operating cashflow
- The relative priority placed on the pension scheme compared to corporate finances
- An estimate of the amount which might be available to the scheme on insolvency of the employer as well as the likelihood of that eventuality.

ASSESSING EMPLOYER COVENANT

The employer covenant will be assessed objectively and its ability to meet their obligations will be viewed in the context of the Fund's exposure to risk and volatility based on publically available information and/or information provided by the employer. The monitoring of covenant strength along with the funding position (including on the termination basis) enables the Fund to anticipate and pre-empt employer funding issues and thus adopt a proactive approach. In order to objectively monitor the strength of an employer's covenant, adjacent to the risk posed to the Fund, a number of fundamental financial metrics will be reviewed to develop an overview of the employer's stability and a rating score will be applied using a Red/Amber/Greed (RAG) rating structure.

In order to accurately monitor employer covenant, it will be necessary for research to be carried out into employers' backgrounds and, in addition, for those employers to be contacted to gather as much information as possible. Focus will be placed on the regular monitoring of employers with a proactive rather than reactive view to mitigating risk.

The covenant assessment will be combined with the funding position to derive an overall risk score. Action will be taken if these metrics meet certain triggers based on funding level, covenant rating and the overall risk score

FREQUENCY OF MONITORING

The funding position and contribution rate for each employer participating in the Fund will be reviewed as a matter of course with each triennial actuarial valuation. However, it is important that the relative financial strength of employers is reviewed regularly to allow for a thorough assessment of the financial metrics. The funding position will be monitored (including on the termination basis) using an online system provided to officers by the Fund Actuary.

Employers subject to a more detailed review, where a risk criterion is triggered, will be reviewed at least every six months, but more realistically with a quarterly focus.

COVENANT RISK MANAGEMENT

The focus of the Fund's risk management is the identification and treatment of the risks and it will be a continuous and evolving process which runs throughout the Fund's strategy. Mechanisms that will be explored with certain employers, as necessary, will include but are not limited to the following:

1. Parental Guarantee and/or Indemnifying Bond
2. Transfer to a more prudent actuarial basis (e.g. the termination basis)
3. Shortened recovery periods and increased cash contributions
4. Managed exit strategies
5. Contingent assets and/or other security such as escrow accounts.

APPENDIX E

GLOSSARY

Actuarial Valuation:
An investigation by an actuary into the ability of the Fund to meet its liabilities. For the LGPS the Fund Actuary will assess the funding level of each participating employer and agree contribution rates with the administering authority to fund the cost of new benefits and make good any existing deficits as set out in the separate Funding Strategy Statement. The asset value is based on market values at the valuation date.

Administering Authority:
The council with a statutory responsibility for running the Fund and that is responsible for all aspects of its management and operation.

Admission bodies:
A specific type of employer under the Local Government Pension Scheme (the "LGPS") who do not automatically qualify for participation in the Fund but are allowed to join if they satisfy the relevant criteria set out in the Regulations.

Benchmark:
A measure against which fund performance is to be judged.

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

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

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

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

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 or affordability constraints in the short term.

Deficit:
The extent to which the value of the Fund's past service liabilities exceeds the value of the Fund's assets. This relates to assets and liabilities built up to date, and ignores the future build-up of pension (which in effect is assumed to be met by future contributions).

Deficit recovery period:
The target length of time over which the current deficit is intended to be paid off. A shorter period will give rise to a higher annual contribution, and vice versa.

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

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

Employing bodies:
Any organisation that participates in the LGPS, including admission bodies and Fund employers.

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

Fund / Scheme Employers:
Employers that have the statutory right to participate in the LGPS. These organisations (set out in Part 1 of Schedule 2 of the 2013 Regulations) would not need to designate eligibility, unlike the Part 2 Fund Employers.

Funding or solvency Level:
The ratio of the value of the Fund's assets and the value of the Fund's liabilities expressed as a percentage.

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

Government Actuary's Department (GAD):
The GAD is responsible for providing actuarial advice to public sector clients. GAD is a non-ministerial department of HM Treasury.

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.

Investment Strategy:

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

Letting employer:

An employer that outsources part of its services/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.

Liabilities:

The actuarially calculated present value of all benefit entitlements i.e. Fund cashflows of all members of the Fund, built up to date or in the future. The liabilities in relation to the benefit entitlements earned up to the valuation date are compared with the present market value of Fund assets to derive the deficit and funding/solvency level. Liabilities can be assessed on different set of actuarial assumptions depending on the purpose of the valuation.

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.

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).

Minimum risk basis:

An approach where the discount rate used to assess the liabilities is determined based on the market yields of Government bond investments based on the appropriate duration of the liabilities being assessed. This is usually adopted when an employer is exiting the Fund.

Orphan liabilities:

Liabilities in the Fund for which there is no sponsoring employer within the Fund. Ultimately orphan liabilities must be underwritten by all other employers in the Fund.

Percentiles:

Relative ranking (in hundredths) of a particular range. For example, in terms of expected returns a percentile ranking of 75 indicates that in 25% of cases, the return achieved would be greater than the figure, and in 75% cases the return would be lower.

Phasing/stepping of contributions:

When there is an increase/decrease in an employer's long term contribution requirements, the increase in contributions can be gradually stepped or phased in over an agreed period. The phasing/stepping can be in equal steps or on a bespoke basis for each employer.

Pooling:

Employers may be grouped together for the purpose of calculating contribution rates, (i.e. a single contribution rate applicable to all employers in the pool). A pool may still require each individual employer to ultimately pay for its own share of deficit, or (if formally agreed) it may allow deficits to be passed from one employer to another.

Prepayment:

The payment by employers of contributions to the Fund earlier than that certified by the Actuary. The amount paid will be reduced in monetary terms compared to the certified amount to reflect the early payment.

Present Value:

The value of projected benefit payments, discounted back to the valuation date.

Primary rate:

The contribution rate required to meet the cost of future accrual of benefits, ignoring any past service surplus or deficit but allowing for any employer-specific circumstances, such as its membership profile, the funding strategy adopted for that employer, the actuarial method used and/or the employer's covenant.

Profile:

The profile of an employer's membership or liability reflects various measurements of that employer's members, i.e. 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.

Prudent Assumption:

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

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.

Real Return or Real Discount Rate:

A rate of return or discount rate net of (CPI) inflation.

Recovery Plan:

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

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, 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 rate:

The adjustment to the Primary rate to arrive at the total contribution each employer is required to pay. It is essentially the additional contribution (or reduction in contributions) resulting from any deficit (or surplus) attributable to the employer within the Fund.

Section 13 Valuation:

In accordance with Section 13 of the Public Service Pensions Act 2014, the Government Actuary's Department (GAD) have been commissioned to advise the Department for Communities and Local Government (DCLG) in connection with reviewing the 2016 LGPS actuarial valuations. All LGPS Funds therefore will be assessed on a standardised set of assumptions as part of this process.

Solvency Funding Target:

An assessment of the present value of benefits to be paid in the future. The desired funding target is to achieve a solvency level of a 100% i.e. assets equal to the accrued liabilities at the valuation date assessed on the ongoing concern basis.

Valuation funding basis:

The financial and demographic assumptions used to determine the employer's contribution requirements. The relevant discount rate used for valuing the present value of liabilities is consistent with an expected rate of return of the Fund's investments. This includes an expected out-performance over gilts in the long-term from other asset classes, held by the Fund.

50/50 Scheme:

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

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AGENDA ITEM 8

PENSIONS COMMITTEE
7 DECEMBER 2016

ADMINISTERING AUTHORITY – ADMINISTRATION UPDATE

Recommendation

1. **The Head of Human Resources and Organisational Development recommends that the general update from the Administering Authority be noted.**

Pension Fund Triennial Valuation 2016

2. The Team have provided the required membership information to the Actuary, Mercers.

3. The Administration Forum held on 17 October 2016 was dedicated to an update on this year's valuation and the session will be led by the Actuary. Over 45 employers attended to receive an overview of the results and each employer had an opportunity to meet the actuary on a one to one basis.

4. The valuation results have been issued to all employers and discussions regarding affordability are being managed by the Finance Manager (Pensions, Treasury Management and Capital).

Government Consultations

5. The new draft Regulations and guidance in respect of the introduction of a ‘cap’ on exit payments (referred to as a termination cap) are expected to be issued for consultation in early 2017. There will then be a 4 to 6 week consultation period, followed by a response through Parliament, so we are expecting the effective date to be spring next year subject to the timetable holding.

Admissions to the Fund

6. Liberata UK have now been admitted to the Fund.

7. The Fund is currently working on 8 more admissions agreements and once finalised these will be reported to the Committee.

Pension Taxation Limits

Annual allowance (AA)

Year	Annual allowance Limit
2013/14	£50,000
2014/15	£40,000
2015/16	£80,000 (but split pre and post the date of 8 July 2015 due to the budget – limit is £40,000 per period, but with a maximum carryover of £40,000
2016/17	£40,0000 but with tapering to £10,000 for some people which is explained below *

8. From 6 April 2016, the pension input period (PIP) for all pension schemes was aligned to the tax year - 6 April to 5 April. Prior to 2016/17 the PIP for the LGPS was 1 April to 31 March, except for the year 2015/16 when special transitional rules applied.

9. From 6 April 2016 the AA is reduced for those individuals who have income over certain levels. Broadly affecting those whose;

- Threshold income" (total earnings less pension contributions paid) is above £110,000
- "Adjusted income" (threshold income plus the value of pension growth over the year) is above £150,000

*Where members satisfy both points the AA will be reduced by £1 for every £2 that the adjusted income exceeds £150,000. However, the maximum reduction that can apply to the AA is £30,000 leaving an AA of £10,000

Lifetime Allowance (LTA)

10. On 6 April 2016 the LTA reduced from £1.25m to £1.0m

11. As of today we are not aware of any taxation changes but we are waiting any announcements following the Chancellor's Autumn Statement on 23 November.

12. Any changes introduced will be notified to our membership.

GMP Reconciliation

13. The Administering Authority is preparing for phase 2 of the GMP reconciliation exercise which will require us to data cleanse all data received from HMRC to make sure that we only have the relevant liabilities held in the Pension Fund. Any discrepancies need to be reported back to HMRC for further investigation. HMRC will support queries generated by the Scheme Reconciliation Services up to December 2018. HMRC will then issue pension statements to all individuals.

Contact Points

County Council Contact Points
County Council: 01905 763763

Worcestershire Hub: 01905 765765

Specific Contact Points for this report
Bridget A Clark, HR/OD Service and Commissioning Manager
Tel: 01905 846215
Email: bclark@worcestershire.gov.uk

Background Papers

In the opinion of the proper officer (in this case the Head of Human Resources and Organisational Development) there are no background papers relating to the subject matter of this report.

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AGENDA ITEM 9

PENSIONS COMMITTEE
7 DECEMBER 2016

PENSION INVESTMENT UPDATE

Recommendation

1. The Chief Financial Officer recommends that:

a) the Independent Financial Adviser's fund performance summary and market background be noted;

b) the update on the Investment Managers placed 'on watch' by the Pension Investment Advisory Panel be noted; and

c) Nomura be taken off 'watch'.

Background

2. The Committee will receive regular updates on fund performance. The fund's Independent Financial Adviser has provided a fund performance summary and a brief market background update (Appendix 1). The market background update is provided to add context to the relative performance and returns achieved by the fund's investment managers.

3. The Committee will also receive regular updates regarding 'on watch' managers and will receive recommendations in relation to manager termination in the event of a loss of confidence in managers by the Advisory Panel (Appendix 1).

Nomura

4. Nomura outperformed the index benchmark in the quarter ended 30 September by 1.4% and in the twelve months to September 2016 had also outperformed the benchmark by 1.8%, which was 0.3% ahead of the target outperformance of +1.5%. Over the past three years Nomura have outperformed their performance target by 0.3% per annum.

5. The ex-Japan elements of the portfolio contributed +1.1% to total portfolio performance in Q2 of 2016 bringing their three year performance in line with the target outperformance. Nomura informed the Pension Investment Advisory Panel of their intention to return to active stock selection in Australia during Q3 of 2016.

6. The portfolio has outperformed target performance of +1.5% over the past year and three years in line with the contract required performance, the Pension Investment Advisory Panel have therefore recommended that Nomura are taken off watch.

JP Morgan Emerging Markets

7. JP Morgan (Emerging Markets) portfolio outperformed their benchmark over the quarter by 2.6%. Performance for the year ended September 2016 was 1.1% ahead of benchmark and therefore 0.9% behind their target outperformance of +2.0% per annum. Over the past three years JP Morgan have underperformed their performance target by 1.9% per annum.

8. It is recommended that JP Morgan remain 'on watch' until consistent outperformance is regained.

JP Morgan Bonds

9. The JP Morgan Bond portfolio outperformed their benchmark by 0.4% in the quarter ended September 2016. Performance for the year ended September 2016 was ahead of benchmark by 0.8% and therefore 0.2% behind their target outperformance. Over the past three years they have underperformed their performance target by 0.5% per annum.

10. It is recommended that JP Morgan (Bonds) remain on watch until their three year performance is tracking further towards target and the Committee are fully satisfied that JP Morgan are managing their portfolio risk budget effectively.

Contact Points

County Council Contact Points
County Council: 01905 763763
Worcestershire Hub: 01905 765765

Specific Contact Points for this report
Sean Pearce, Chief Financial Officer
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Supporting Information

- Independent Financial Adviser summary report (Appendix 1)

- Bar Chart of investment managers' performance (Appendix 2) – To follow

- Portfolio Evaluation Performance Report (Appendix 3) – To follow

Background Papers

In the opinion of the proper officer (in this case the Chief Financial Officer) there are no background papers relating to the subject matter of this report.

Allenbridge

REPORT PREPARED FOR

Worcestershire County Council Pension Fund

November 2016

Philip Hebson

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Independent Investment Adviser's report

Global overview

There were two main themes playing on investors' minds during the "holiday" quarter; the continuing cogitations on the implications of "Brexit", and the deepening farce of "The US Presidential Election Show". We now know the outcome of the latter, more of which below. On Brexit, it seemed to take a spat between Unilever and Tesco about the increase in the price of Marmite to wake people up to the reality of the implications in the sharp decrease in the value of Sterling versus the US$, and also the Euro.

On Tuesday 8 November I spotted this headline about the US election, "Today America chooses between two candidates who are simply unfit for office". I am writing this with a large bit of the morning after the night before feeling, now the choice has been made. For better or for worse, we will all have to learn to live with the fact that Donald Trump will be the next President of the United States of America. It is to be hoped that now the election is over the bluster and rhetoric that has formed so much of the campaign will now die away, and instead the focus will now be on what Mr Trump will do in reality, particularly as he ostensibly has the support of Congress. That support may well be qualified, and may provide some break on some of his more extreme proposals. At this stage it is difficult to predict the eventual impact on the economy in the medium to long term, but at least for the time being economic data in the US is encouraging.

In the UK, it's all about "Brexit". From an economic viewpoint, so far so good, in the short term. There are the emerging ramifications of the fall in the value of sterling, including higher inflation, but ultimately this may well do more good than harm. The Prime Minister has taken the stance that from a negotiating point of view, the exit has to be clear cut, otherwise her Government's bargaining power would be compromised. There are others who seek a softer stance.

With regards to Europe, I am drawn to the comments that Martin Gilbert, CEO of Aberdeen Asset Management, made following the US election. "Trump's victory is another example of a vote against the status quo. As with the UK referendum, many people voted against the establishment as they believed they have been ignored for many years and the recent low growth, non-inclusive growth environment has only accentuated this feeling. In the upcoming elections and referendums taking place across Europe we are likely to witness further votes against the establishment. So political risk will remain a firm part of the investment landscape for the foreseeable future." In the near term there is the Italian referendum on constitutional reforms to consider, the outcome of which can hardly be deemed to be certain. Who would now bet against the prospect of Marine Le Pen being elected in the French General Election next year?

I am glad to be a bit more positive about the Japanese economy this time, having begun to wonder what it would take to see an improvement. This improvement in data helped cyclical sectors to significantly outperform. There remain issues with weak domestic consumption, and the consequences of the eventual unwinding of monetary easing.

Emerging Markets as a group enjoyed another good quarter, with less emphasis on commodity pricing issues. China was the stand out performer, with heavy stimulus to the property sector. The snag is that this has added yet more debt to the outstanding balance, so the boost to confidence may yet turn out to be short lived. Brazil continued to benefit from improved political stability, maybe also the relief element that the Olympic Games passed off well helped sentiment. Turkey had a bit of a local issue, namely a failed coup. The potential cloud on the horizon is President elect Trump, with his declared trade policy having a detrimental impact on emerging markets.

Worcestershire County Council Pension Fund   Quarter to end September 2016

Summary and Market Background

The value of the Fund in the quarter rose to £2.237bn, an increase of £171m compared to the end June value of £2.066bn. The Fund produced a return of 8.3% over the quarter, which gave an outperformance against the benchmark of 0.8%. Over a 12 month period the Fund recorded a positive relative return against the benchmark of 1.4% (24.9% v. 23.5%).

The third quarter 2016 was an excellent period for the Fund's active managers. The three active equity mandates all outperformed their benchmarks in Q3, with JP Morgan (Emerging Markets) leading the field at 2.6%, followed by Schroders (Emerging Markets) at 1.5% and Nomura (Pacific) by 1.4%. JP Morgan (Bonds) also outperformed, by 0.4%.
The alternative passive strategies have continued to produce a return ahead of their respective benchmarks (0.2% in aggregate), and ahead of the traditional passive index benchmark.

Rather to my surprise world markets enjoyed another good quarter, certainly on a sterling adjusted basis. The MSCI World Index showed a rise of 8.5%. The grouping of Asian developed and all emerging markets fared best, with a rise in the MSCI Asia Pacific ex Japan of 13%, closely followed by Emerging Markets at 12.3%. Japan was up 11.9%. Emerging Markets are up 32% for the year to date at 30 September. Europe rose 9.2%, the UK FTSE All-Share rose 7.8% and if there was a laggard, it was the US at "only" 7.1%.

Bond markets, both Government and Corporate, also saw strong performance in total returns. With concerns about higher inflation, not surprisingly UK index linked fared best (11.0%), but we also saw a strong performance from corporate bonds, particularly US corporate high yield, up 8.6%. Again some of the sterling adjusted returns for 2016 to the end of September are quite extraordinary, some indices being up over 30%, with the Barclays Global Aggregate Bond index up 20%.

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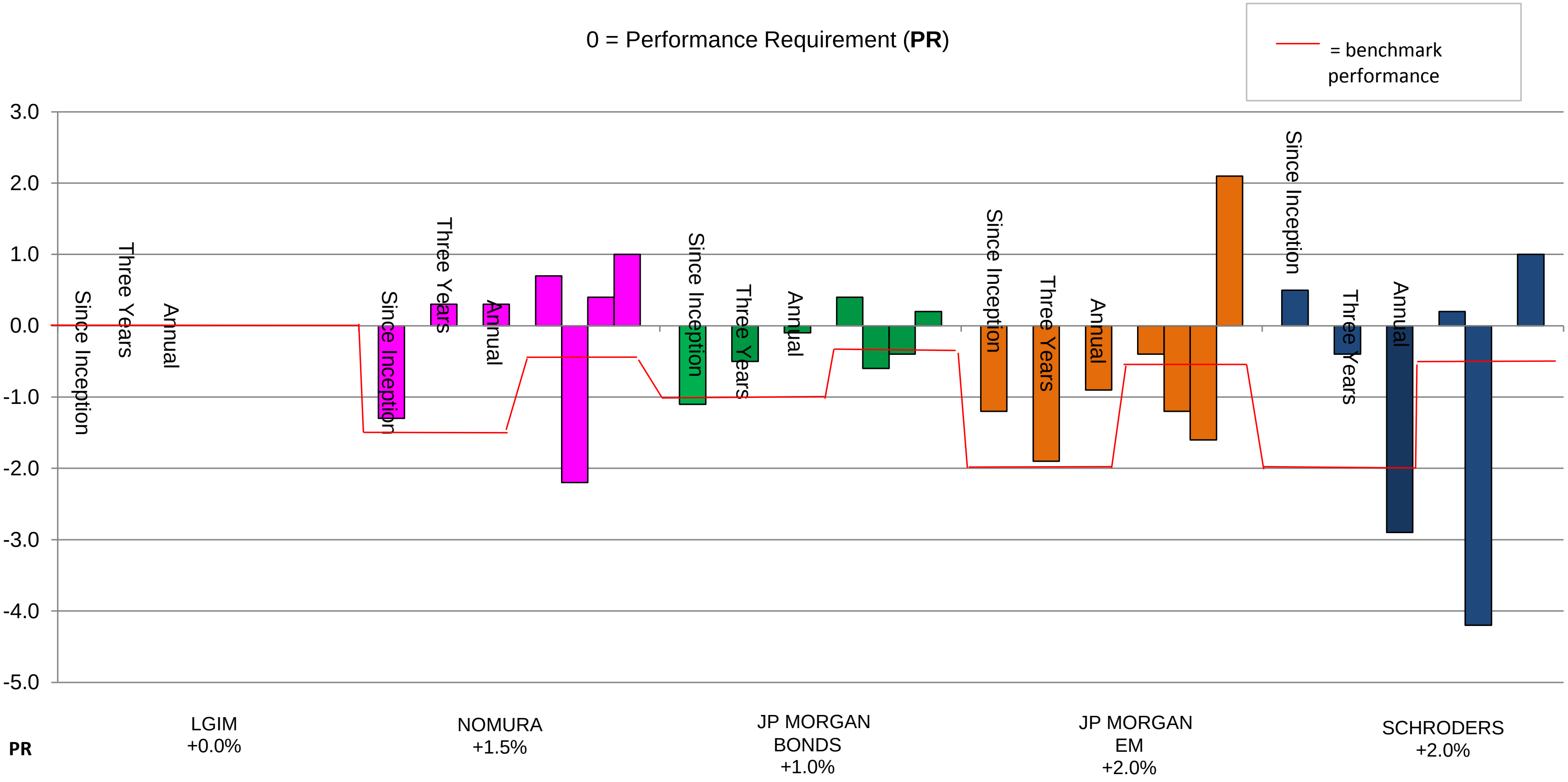
Worcestershire County Council Pension Fund - Chart showing for each manager: performance since inception, three years, annual performance October 2015 to September 2016 and latest year in quarter ends December 2015 September 2016, relative to performance requirement



Key Highlights

- The performance trend for Nomura and JP Morgan Bonds continues to improve on a three year basis compared to since inception. Nomura have achived target returns for the past one and three years and it is recommended that they are taken 'off watch' by the panel.

- JP Morgan Emerging Markets portfolio has performed strongley in quarter 3 of 2016 but remains behind target and benchmark over the past one, three years and since inception.

- Schroders continue to recover from a very poor Q1 of 2016 and whilst the one year return is far below benchmark and target the since inception returns are strong.

- LGIM, the Fund's passive equity manager, is providing returns in line with their benchmarks.

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Quarterly Risk and Return Analysis
Total Fund

Worcestershire County Council Pension Fund

Period ending 30th September 2016

PORTFOLIO
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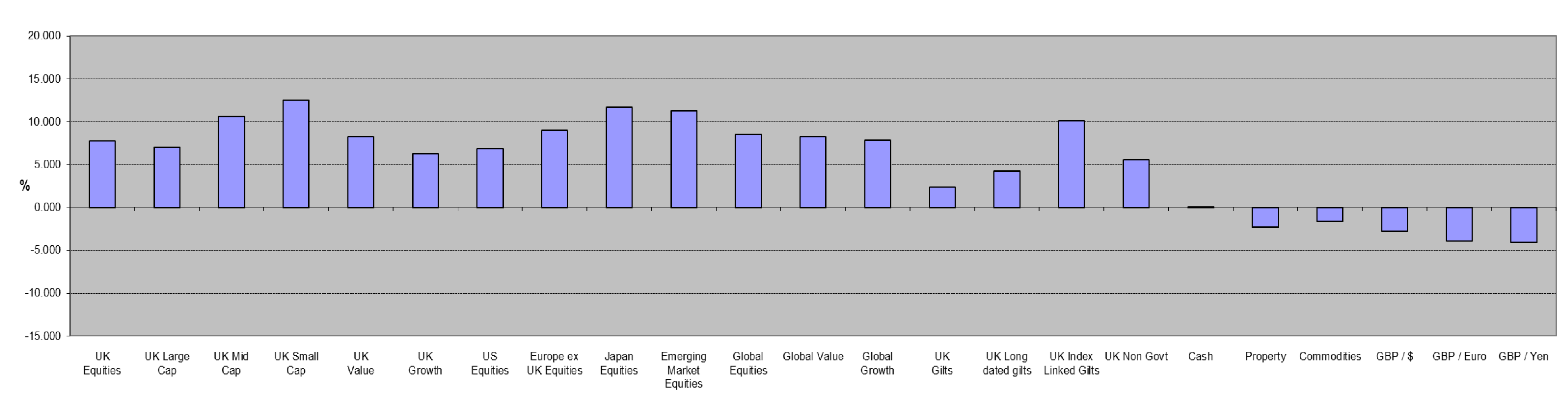
Specialists in Investment Risk and Return Evaluation

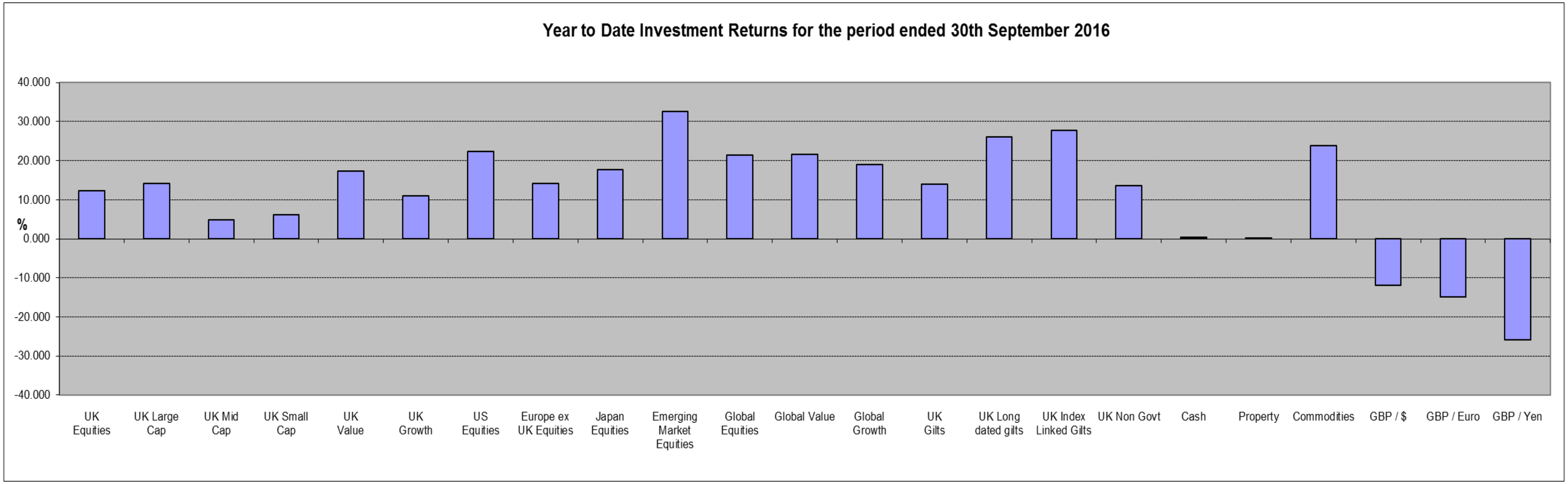
Portfolio Evaluation Ltd Market Commentary Q3 2016 (sterling)

The investment returns for the quarter ended September 2016 were driven by the realisation by investors that Brexit would take some time to have an impact and good news from housing markets and retailers. Additionally there was good news from the U.S. economy in terms of growth but not so good in terms of employment growth that led to an expectation that U.S. interest rate increases may be deferred until the end of the year. We also saw the price of Oil and other commodities increase which was seen as a positive indicator for global growth.

However it should be noted that continued positive equity returns (when many managers consider the markets fully valued), continued bond investors moving down the credit rating levels in a search for yield coupled with increased market volatility and increased consumer borrowing has not always been a good medium term mix for investors. It should also be noted that whilst Clinton is expected to win the US election (a favourable outcome for many) the race is quite close with Trump and with disaffected working classes we may see a Brexit type surprise, and whilst Trump will be initially be seen favourably by the markets the medium term is more uncertain as it would be the start of a new outlook resulting in increased market uncertainty.

Quarterly Investment Returns for the period ended 30th September 2016




Year to Date Investment Returns for the period ended 30th September 2016

The outlook for the UK (which is expected to be quite short term i.e. a couple of years) is generally one where commentators are still talking about a sustained period of low / negative economic growth as investors and companies wait to see the negotiating positions of the UK and EU.

Given our role for clients we are particularly interested in market risk. It is worth noting that market volatility has increased significantly through the year, with a significant additional spike due to Brexit, as investor risk aversion increases. This theme is expected to continue into 2017.

For further information

If you would like further information about the topics contained in this newsletter or would like to discuss your investment performance requirements please contact Nick Kent or Deborah Barlow Tel: +44 (0)113 242 9381 (e-mail: nick.kent@portfolioevaluation.net) or visit our website at www.portfolioevaluation.net. Please note that all numbers, comments and ideas contained in this document are for information purposes only and as such are not investment advice in any form. Please remember that past performance is not a guide to future performance.

Worcestershire County Council Pension Fund - Commentary
Period ending 30th September 2016

QUARTERLY SUMMARY: **Worcestershire County Council Pension Fund Return: 8.3% Benchmark Return: 7.5% Excess Return: 0.8%**

- The Fund achieved a total return of 8.3%. This was driven by equity markets and continued sterling depreciation and to a minor degree falling bond yields generating positive bond returns (despite bond yields beginning to increase in September).
- The Fund outperformed its benchmark this quarter by 0.8%. This was partly due to asset allocation as the Fund was overweight equities and underweight bonds and European equities both of which underperformed the Total Fund benchmark. Additionally stock selection (portfolio performance relative to the portfolio benchmark) was also a positive contributor to excess performance due to the active equity portfolios and the corporate bond portfolio.
- Property assets outperformed partly due to sterling depreciation versus the U.S. dollar and euro.
- Of the active managers Nomura (Pacific Basin equities), Schroders (Emerging Market equities) and JPMorgan (Emerging Market equities) outperformed. All index funds tracked their benchmarks.
- Please note that for Green Investment Bank returns are not available for the quarter as data is lagged by the manager.

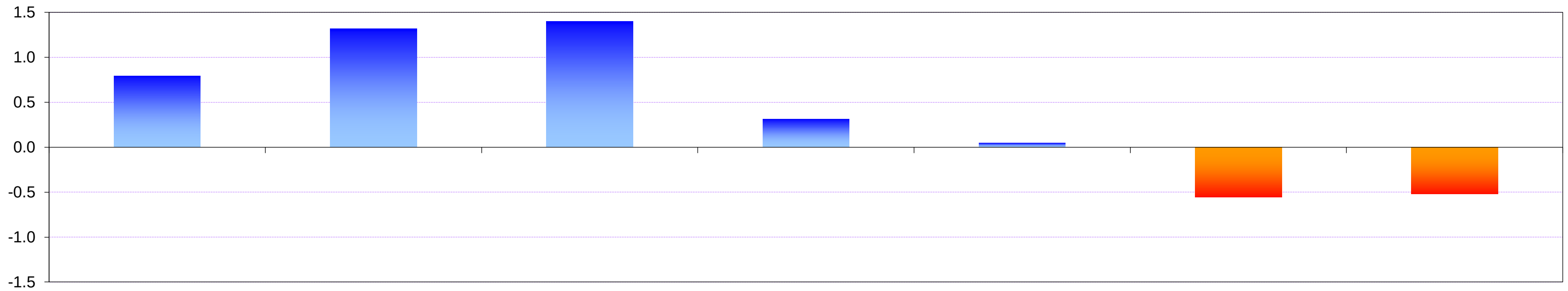
YEAR SUMMARY AND LONGER: **Worcestershire County Council Pension Fund Return: 24.9% Benchmark Return: 23.5% Excess Return: 1.4%**

- We have only monitored the Fund for a little more than a quarter and therefore our long term observations are limited for now especially given the restructuring of equity portfolios and increase in exposure to Infrastructure and Property assets.
- Over the financial YTD (since we have been measuring the portfolio) the Fund has generated a return of 15.8% outperforming the benchmark by 1.3%. The portfolio has outperformed both from asset allocation and stock selection as per the comments in the quarterly summary.
- Over both the one and three year period the Fund has outperformed and the performance is flat (versus benchmark) over the five year period. However over the longer term the Fund has underperformed.
- Over the one year period Nomura (Pacific Basin equities) and JPM (Emerging Markets equities) and JPM corporate bonds have outperformed whilst Schroders Emerging Market equities underperformed.
- Over the three year period Nomura (Pacific Basin equities),Schroders (Emerging Markets equities) and JPM corporate bonds have outperformed whilst JPM Emerging Market equities has underperformed.
- The Total Risk of the Fund is consistent with that of a typical multi asset class Fund with the recent increase reflective of a general increase in market risk. Active risk is also consistent with a typical multi asset class Fund that uses both passive and active strategies. The recent increase is probably due to the short term variance between Property and Infrastructure assets and absolute return benchmarks.

Total Fund Overview
Worcestershire County Council Pension Fund
for Quarter Ended 30th September 2016

Market Value: £2.24bn

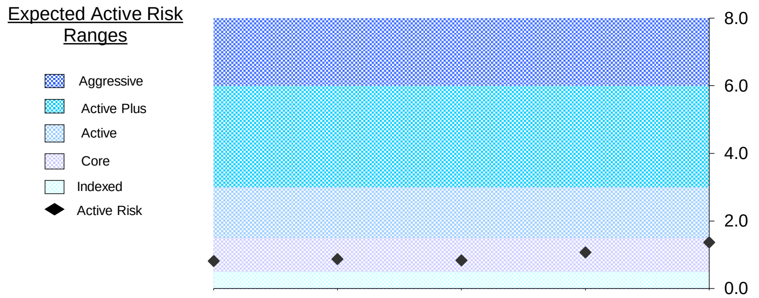
Excess Return Analysis (%)



	QTR	YTD	1 Yr	3 Yr	5 Yr	10Yr	Mar-87
Portfolio Return	8.3	15.8	24.9	10.1	12.0	6.5	8.0
Benchmark Return	7.5	14.4	23.5	9.8	11.9	7.0	8.6
🟦🟥 Excess Return	0.8	1.3	1.4	0.3	0.0	-0.6	-0.5

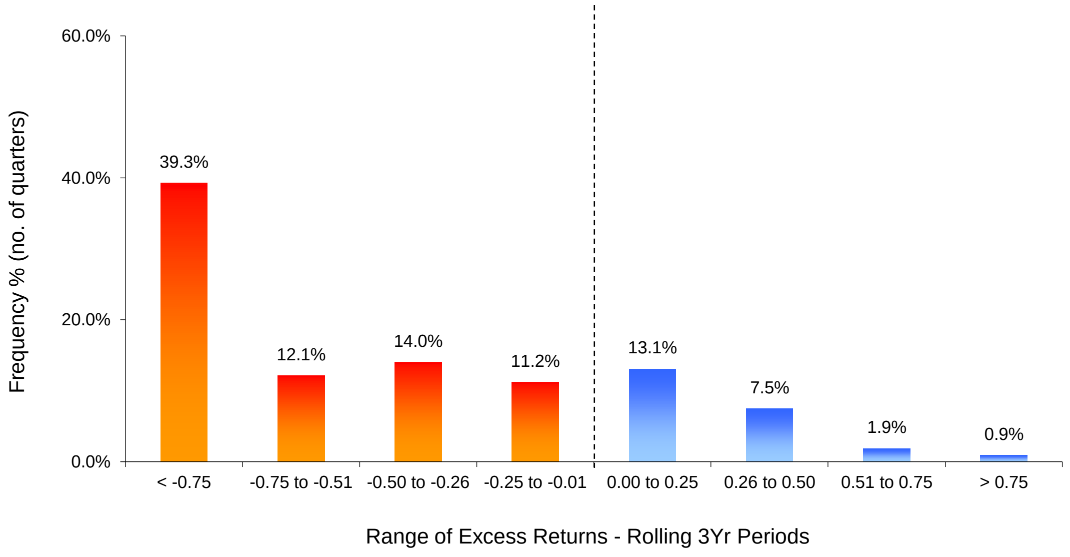
All returns for periods in excess of 1 year are annualised.

Ex-Post Active Risk Analysis



	1Yr	3Yr	5Yr	10Yr	Mar-87
Active Risk	0.8	0.9	0.8	1.1	1.4
Portfolio Risk	8.1	8.8	9.3	13.2	13.0
Benchmark Risk	7.9	8.5	9.1	12.6	12.8

Excess Return Consistency Analysis

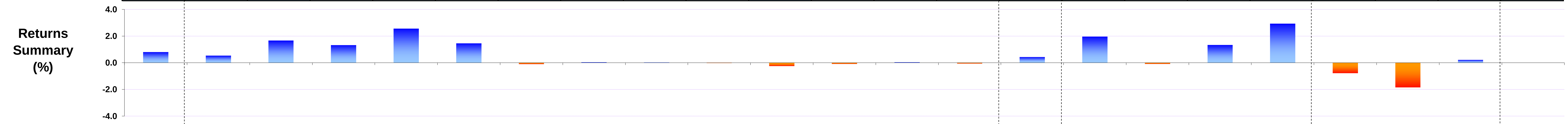


Ex-Post Active Risk measures the volatility of the actual (Monthly) excess returns achieved by the Portfolio
Excess Return Consistency Analysis measures the frequency of the Fund’s outperformance (Blue) and underperformance (Red) versus its benchmark over rolling periods; calculated using quarterly returns since inception.

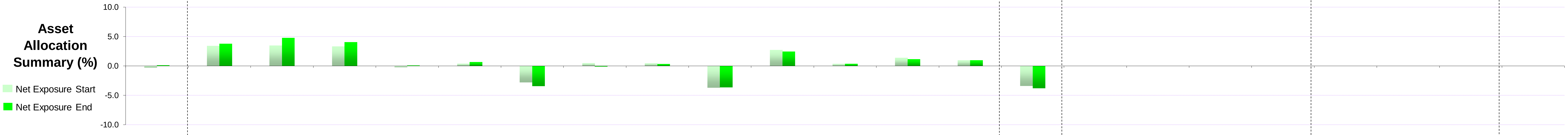
PORTFOLIO EVALUATION LIMITED

Attribution to Total Fund Excess Return Analysis
Worcestershire County Council Pension Fund
for Quarter Ended 30th September 2016

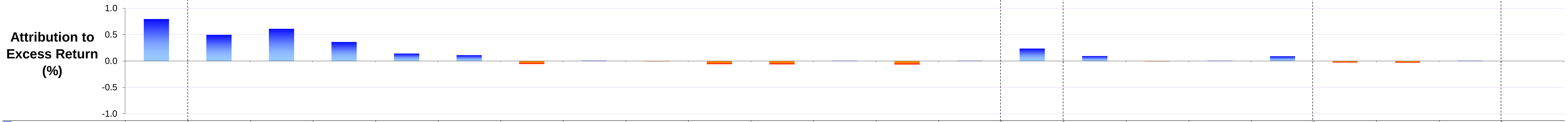
Market Value: £2.24bn



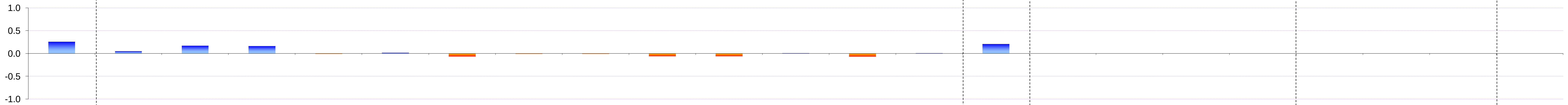
	Total Fund	Total Equity	*Total Active Equity*	Far East Developed - Nomura	Emerging Markets - JPM	Emerging Markets - Schroder	*Total Passive Equity*	UK Equity - L&G	North American Equity - L&G	Europe ex UK Equity - L&G	*Total Alternatives*	FTSE RAFI DEV - L&G	MSCI World Min Vol TR - L&G	MSCI World Quality TR - L&G	Corporate Bond - JPM	Total Property	UK Property - VENN	US Property - Walton Street	Euro Property - Invesco	Total Infra	UK Infra - Green	UK Infra Core - Hermes	Cash
Portfolio Return	**8.3**	**9.3**	13.4	13.5	13.8	12.7	7.8	7.8	7.1	9.1	6.1	8.5	2.5	8.0	**2.1**	**3.7**	2.1	2.9	4.5	**1.2**	0.0	2.2	**0.0**
Benchmark Return	**7.5**	**8.8**	11.7	12.2	11.2	11.2	7.9	7.8	7.1	9.1	6.3	8.5	2.5	8.0	**1.7**	**1.8**	2.2	1.6	1.6	**1.9**	1.8	2.0	**0.0**
Excess Return	**0.8**	**0.5**	1.7	1.3	2.5	1.5	-0.1	0.0	0.0	0.0	-0.2	-0.1	0.0	-0.1	**0.4**	**2.0**	-0.1	1.3	2.9	**-0.8**	-1.8	0.2	**0.0**



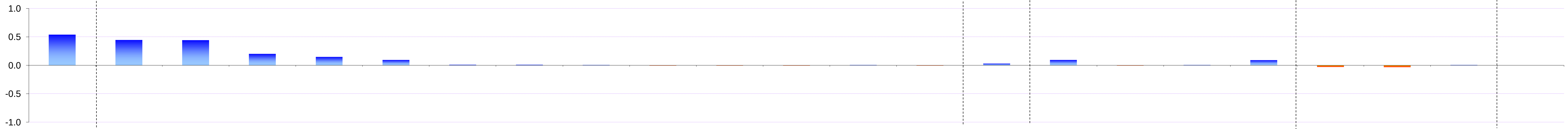
	Total Fund	Total Equity	*Total Active Equity*	Far East Developed - Nomura	Emerging Markets - JPM	Emerging Markets - Schroder	*Total Passive Equity*	UK Equity - L&G	North American Equity - L&G	Europe ex UK Equity - L&G	*Total Alternatives*	FTSE RAFI DEV - L&G	MSCI World Min Vol TR - L&G	MSCI World Quality TR - L&G	Corporate Bond - JPM	Total Property	UK Property - VENN	US Property - Walton Street	Euro Property - Invesco	Total Infra	UK Infra - Green	UK Infra Core - Hermes	Cash
Portfolio Start	**100.0**	**85.1**	27.5	15.3	5.8	6.4	45.0	27.7	11.5	5.8	12.7	3.7	4.7	4.3	**6.6**	**4.7**	1.4	0.2	3.1	**3.6**	1.7	1.9	**0.0**
Portfolio End	**100.0**	**86.0**	28.8	16.0	6.1	6.6	44.8	27.6	11.3	5.9	12.4	3.7	4.5	4.3	**6.2**	**4.5**	1.2	0.3	3.0	**3.3**	1.6	1.7	**0.0**
Benchmark Start	**100.0**	**81.7**	24.0	12.0	6.0	6.0	47.7	27.2	11.0	9.5	10.0	3.3	3.3	3.3	**10.0**	**4.7**	1.4	0.2	3.1	**3.6**	1.7	1.9	**0.0**
Benchmark End	**100.0**	**82.2**	24.0	12.0	6.0	6.0	48.2	27.7	11.0	9.5	10.0	3.3	3.3	3.3	**10.0**	**4.5**	1.2	0.3	3.0	**3.3**	1.6	1.7	**0.0**



	Total Fund	Total Equity	*Total Active Equity*	Far East Developed - Nomura	Emerging Markets - JPM	Emerging Markets - Schroder	*Total Passive Equity*	UK Equity - L&G	North American Equity - L&G	Europe ex UK Equity - L&G	*Total Alternatives*	FTSE RAFI DEV - L&G	MSCI World Min Vol TR - L&G	MSCI World Quality TR - L&G	Corporate Bond - JPM	Total Property	UK Property - VENN	US Property - Walton Street	Euro Property - Invesco	Total Infra	UK Infra - Green	UK Infra Core - Hermes	Cash
Excess Return	**0.8**	**0.5**	0.6	0.4	0.1	0.1	-0.1	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.0	**0.2**	**0.1**	0.0	0.0	0.1	**0.0**	0.0	0.0	**0.0**



	Total Fund	Total Equity	*Total Active Equity*	Far East Developed - Nomura	Emerging Markets - JPM	Emerging Markets - Schroder	*Total Passive Equity*	UK Equity - L&G	North American Equity - L&G	Europe ex UK Equity - L&G	*Total Alternatives*	FTSE RAFI DEV - L&G	MSCI World Min Vol TR - L&G	MSCI World Quality TR - L&G	Corporate Bond - JPM	Total Property	UK Property - VENN	US Property - Walton Street	Euro Property - Invesco	Total Infra	UK Infra - Green	UK Infra Core - Hermes	Cash
Asset Allocation	**0.3**	**0.0**	0.2	0.2	0.0	0.0	-0.1	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.0	**0.2**	**0.0**	0.0	0.0	0.0	**0.0**	0.0	0.0	**0.0**



	Total Fund	Total Equity	*Total Active Equity*	Far East Developed - Nomura	Emerging Markets - JPM	Emerging Markets - Schroder	*Total Passive Equity*	UK Equity - L&G	North American Equity - L&G	Europe ex UK Equity - L&G	*Total Alternatives*	FTSE RAFI DEV - L&G	MSCI World Min Vol TR - L&G	MSCI World Quality TR - L&G	Corporate Bond - JPM	Total Property	UK Property - VENN	US Property - Walton Street	Euro Property - Invesco	Total Infra	UK Infra - Green	UK Infra Core - Hermes	Cash
Stock Selection	**0.5**	**0.4**	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**	**0.1**	0.0	0.0	0.1	**0.0**	0.0	0.0	**0.0**

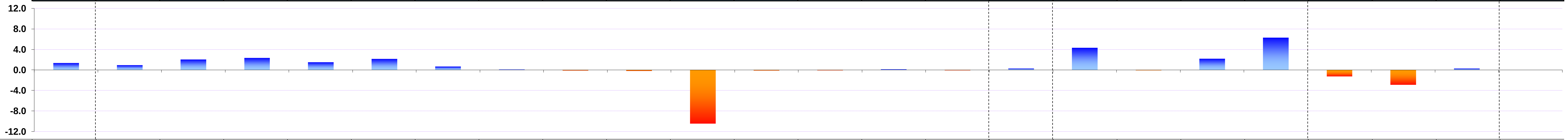
The **Returns Summary** details the Portfolio, Benchmark and Excess Returns. The Excess Returns are plotted. The **Asset Allocation Summary** details the weights held by the portfolio and benchmark in each asset class/manager. The green plots are the over/underweight exposures of the Fund (v Fund benchmark) at the beginning and end of the period. The **Attribution to Excess Return**, identifies how each asset class/manager has contributed to the overall excess return of the Total Fund. It is broken down into **Asset Allocation** (how successful the decision to over/underweight each asset class was) and then into **Stock Selection** (how well each manager/s decisions have performed). The **Asset Allocation** plus the **Stock Selection** excess returns are all additive and equal the **Total Excess Return** of the Fund.

Attribution to Total Fund Excess Return Analysis
Worcestershire County Council Pension Fund
for Year to Date Ended 30th September 2016

Market Value: £2.24bn

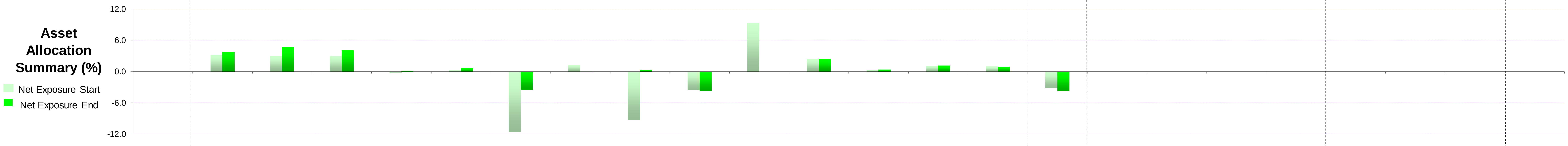
PORTFOLIO EVALUATION LIMITED

Returns Summary (%)



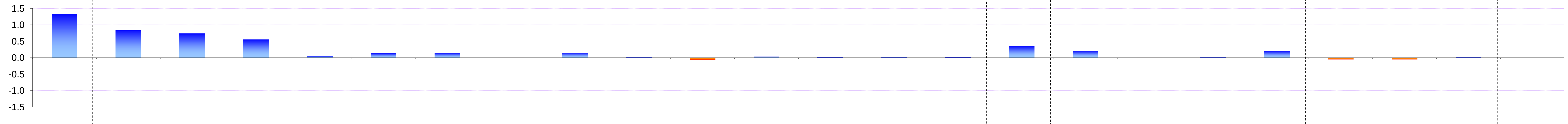
	Total Fund	Total Equity	*Total Active Equity*	Far East Developed - Nomura	Emerging Markets - JPM	Emerging Markets - Schroder	*Total Passive Equity*	UK Equity - L&G	North American Equity - L&G	Europe ex UK Equity - L&G	*Other Overseas (Capital)**	*Total Alternatives*	FTSE RAFI DEV - L&G	MSCI World Min Vol TR - L&G	MSCI World Quality TR - L&G	Corporate Bond - JPM	Total Property	UK Property - VENN	US Property - Walton Street	Euro Property - Invesco	Total Infra	UK Infra - Green	UK Infra Core - Hermes	Cash
Portfolio Return	15.8	17.7	23.8	23.9	23.3	24.0	14.9	12.9	18.0	13.8	-0.1	16.4	17.4	16.1	15.8	5.2	7.8	4.3	5.4	9.5	2.7	0.9	4.4	0.0
Benchmark Return	14.4	16.8	21.8	21.6	21.8	21.8	14.3	12.8	18.1	13.9	10.3	16.5	17.4	16.0	15.8	4.9	3.5	4.4	3.2	3.2	3.9	3.7	4.1	0.0
Excess Return	1.3	0.9	2.0	2.3	1.5	2.1	0.6	0.1	-0.1	-0.2	-10.5	-0.1	0.0	0.1	0.0	0.3	4.3	-0.1	2.2	6.3	-1.2	-2.9	0.3	0.3

Asset Allocation Summary (%)

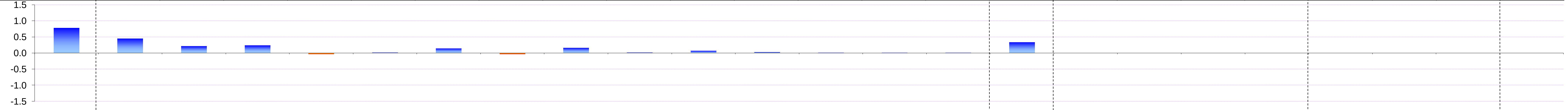


	Total Fund	Total Equity	*Total Active Equity*	Far East Developed - Nomura	Emerging Markets - JPM	Emerging Markets - Schroder	*Total Passive Equity*	UK Equity - L&G	North American Equity - L&G	Europe ex UK Equity - L&G	*Other Overseas (Capital)**	*Total Alternatives*	FTSE RAFI DEV - L&G	MSCI World Min Vol TR - L&G	MSCI World Quality TR - L&G	Corporate Bond - JPM	Total Property	UK Property - VENN	US Property - Walton Street	Euro Property - Invesco	Total Infra	UK Infra - Green	UK Infra Core - Hermes	Cash
Portfolio Start	100.0	84.7	27.0	15.0	5.7	6.2	36.1	28.3	1.7	6.0	9.3	12.4	3.7	4.5	4.3	6.9	4.6	1.2	0.2	3.2	3.8	1.8	2.0	0.0
Portfolio End	100.0	86.0	28.8	16.0	6.1	6.6	44.8	27.6	11.3	5.9	0.0	12.4	3.7	4.5	4.3	6.2	4.5	1.2	0.3	3.0	3.3	1.6	1.7	0.0
Benchmark Start	100.0	81.6	24.0	12.0	6.0	6.0	47.6	27.1	11.0	9.5	0.0	10.0	3.3	3.3	3.3	10.0	4.6	1.2	0.2	3.2	3.8	1.8	2.0	0.0
Benchmark End	100.0	82.2	24.0	12.0	6.0	6.0	48.2	27.7	11.0	9.5	0.0	10.0	3.3	3.3	3.3	10.0	4.5	1.2	0.3	3.0	3.3	1.6	1.7	0.0

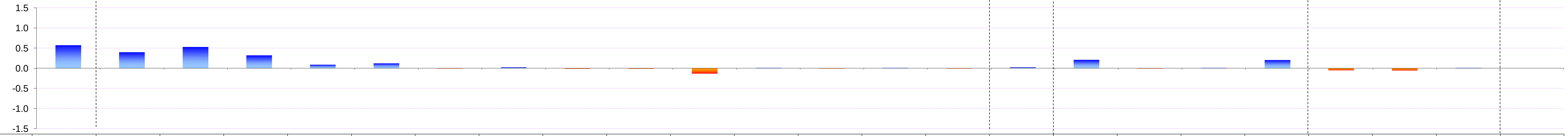
Attribution to Excess Return (%)



	Total Fund	Total Equity	*Total Active Equity*	Far East Developed - Nomura	Emerging Markets - JPM	Emerging Markets - Schroder	*Total Passive Equity*	UK Equity - L&G	North American Equity - L&G	Europe ex UK Equity - L&G	*Other Overseas (Capital)**	*Total Alternatives*	FTSE RAFI DEV - L&G	MSCI World Min Vol TR - L&G	MSCI World Quality TR - L&G	Corporate Bond - JPM	Total Property	UK Property - VENN	US Property - Walton Street	Euro Property - Invesco	Total Infra	UK Infra - Green	UK Infra Core - Hermes	Cash
Excess Return	1.3	0.8	0.7	0.6	0.0	0.1	0.1	0.0	0.2	0.0	-0.1	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.2	-0.1	-0.1	0.0	0.0



	Total Fund	Total Equity	*Total Active Equity*	Far East Developed - Nomura	Emerging Markets - JPM	Emerging Markets - Schroder	*Total Passive Equity*	UK Equity - L&G	North American Equity - L&G	Europe ex UK Equity - L&G	*Other Overseas (Capital)**	*Total Alternatives*	FTSE RAFI DEV - L&G	MSCI World Min Vol TR - L&G	MSCI World Quality TR - L&G	Corporate Bond - JPM	Total Property	UK Property - VENN	US Property - Walton Street	Euro Property - Invesco	Total Infra	UK Infra - Green	UK Infra Core - Hermes	Cash
Asset Allocation	0.8	0.4	0.2	0.2	0.0	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



	Total Fund	Total Equity	*Total Active Equity*	Far East Developed - Nomura	Emerging Markets - JPM	Emerging Markets - Schroder	*Total Passive Equity*	UK Equity - L&G	North American Equity - L&G	Europe ex UK Equity - L&G	*Other Overseas (Capital)**	*Total Alternatives*	FTSE RAFI DEV - L&G	MSCI World Min Vol TR - L&G	MSCI World Quality TR - L&G	Corporate Bond - JPM	Total Property	UK Property - VENN	US Property - Walton Street	Euro Property - Invesco	Total Infra	UK Infra - Green	UK Infra Core - Hermes	Cash
Stock Selection	0.6	0.4	0.5	0.3	0.1	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	-0.1	-0.1	0.0	0.0

The **Returns Summary** details the Portfolio, Benchmark and Excess Returns. The Excess Returns are plotted. The **Asset Allocation Summary** details the weights held by the portfolio and benchmark in each asset class/manager. The green plots are the over/underweight exposures of the Fund (v Fund benchmark) at the beginning and end of the period. The **Attribution to Excess Return**, identifies how each asset class/manager has contributed to the overall excess return of the Total Fund. It is broken down into **Asset Allocation** (how successful the decision to over/underweight each asset class was) and then into **Stock Selection** (how well each manager/s decisions have performed). The **Asset Allocation** plus the **Stock Selection** excess returns are all additive and equal the **Total Excess Return** of the Fund.

*** Partial Return**

Manager Return Analysis
Worcestershire County Council Pension Fund
for Quarter Ended 30th September 2016

Market Value: £2.24bn

					QTR			Year To Date			1 Year			3 Year			5 Year			10 Year			Since Inception		
	Benchmark	Incep Date	Market Value (£m)	Weight	PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER
Total Equity Fund	**Client Specific Weighted Index**	**Mar-16**	**1923**	**86.0**	**9.3**	**8.8**	**0.5**	**17.7**	**16.8**	**0.9**													**17.7**	**16.8**	**0.9**
Total Active Equity Fund	Client Specific Weighted Index	Mar-16	643.5	28.8	13.4	11.7	1.7	23.8	21.8	2.0													23.8	21.8	2.0
Far East Developed Fund - Nomura	FTSE Developed Asia Pacific Index	Feb-03	358.9	16.0	13.5	12.2	1.3	23.9	21.6	2.3	36.5	35.1	1.4	12.3	10.6	1.7	11.4	11.1	0.3	7.5	7.7	-0.3	10.9	10.9	0.0
Emerging Markets Fund - JPM	FTSE All World Emerging Market Index	Dec-11	135.8	6.1	13.8	11.2	2.5	23.3	21.8	1.5	37.5	36.6	0.9	8.1	8.4	-0.3							7.0	6.8	0.2
Emerging Markets Fund- Schroder	FTSE All World Emerging Market Index	Oct-11	148.8	6.6	12.7	11.2	1.5	24.0	21.8	2.1	35.1	36.6	-1.5	9.5	8.4	1.1							7.9	5.7	2.2
Total Passive Equity Fund	Client Specific Weighted Index	Mar-16	1001.2	44.8	7.8	7.9	-0.1	14.9	14.3	0.6													**14.9**	**14.3**	**0.6**
UK Equity Fund - L&G	FTSE All Share Index	Dec-15	617.1	27.6	7.8	7.8	0.0	12.9	12.8	0.1													16.5	16.4	0.1
North American Equity Fund- L&G	FTSE All World North American Index	Dec-15	253.3	11.3	7.1	7.1	0.0	18.0	18.1	-0.1													25.7	25.8	-0.1
Europe ex UK Equity Fund- L&G	FTSE Developed Europe Ex. UK Index	Dec-15	130.9	5.9	9.1	9.1	0.0	13.8	13.9	-0.2													17.6	17.8	-0.3
Total Alternatives Fund	*Client Specific Weighted Index*	*Mar-16*	278.4	*12.4*	*6.1*	*6.3*	*-0.2*	*16.4*	*16.5*	*-0.1*													*16.4*	*16.5*	*-0.1*
FTSE RAFI DEV Fund - L&G	FTSE RAFI Developed 1000 QSR Net Index	Dec-15	82.7	3.7	8.5	8.5	-0.1	17.4	17.4	0.0													24.2	24.3	0.0
MSCI World Min Vol TR Fund - L&G	MSCI World Minimum Volatility Net Index	Dec-15	99.9	4.5	2.5	2.5	0.0	16.1	16.0	0.1													30.1	30.1	0.1
MSCI World Quality TR Fund - L&G	MSCI World Quality Total Return Net Index	Dec-15	95.8	4.3	8.0	8.0	-0.1	15.8	15.8	0.0													23.5	23.5	0.0
Corporate Bond Fund- JPM	**Barclays Capital Global Aggregate - Ex Treasury, Ex Government Related 100% Hedged to GBP**	**Mar-03**	**139.3**	**6.2**	**2.1**	**1.7**	**0.4**	**5.2**	**4.9**	**0.3**	**9.3**	**8.4**	**0.8**	**6.2**	**5.8**	**0.4**	**5.8**	**5.5**	**0.3**	**6.0**	**6.4**	**-0.5**	**5.6**	**5.9**	**-0.3**
Total Property Fund	**Client Specific Weighted Index**	**Mar-16**	**100.4**	**4.5**	**3.7**	**1.8**	**2.0**	**7.8**	**3.5**	**4.3**													**7.8**	**3.5**	**4.3**
UK Property Fund - VENN	Absolute Return +9%	Jul-15	26.4	1.2	2.1	2.2	-0.1	4.3	4.4	-0.1	8.1	9.0	-0.9										6.9	9.6	-2.7
US Property Fund- Walton Street	Absolute Return + 6.5%	Jan-16	7.3	0.3	2.9	1.6	1.3	5.4	3.2	2.2													7.2	3.2	4.0
Euro Property Fund- Invesco	Absolute Return + 6.5%	Feb-16	66.8	3.0	4.5	1.6	2.9	9.5	3.2	6.3													12.3	3.2	9.1
Total Infrastructure Fund	**Client Specific Weighted Index**	**Mar-16**	**74.4**	**3.3**	**1.2**	**1.9**	**-0.8**	**2.7**	**3.9**	**-1.2**													**2.7**	**3.9**	**-1.2**
UK Infrastructure Fund - Green	Absolute Return +7.6%	Apr-15	35.4	1.6	0.0	1.8	-1.8	0.9	3.7	-2.9	-0.1	7.6	-7.7										1.0	7.6	-6.5
UK Infrastructure Core Fund - Hermes	Absolute Return +8.4%	May-15	39.0	1.7	2.2	2.0	0.2	4.4	4.1	0.3	8.9	8.4	0.6										8.3	8.4	0.0
Worcestershire CC Total Fund		**Mar-87**	**2237.2**	**100.0**	**8.3**	**7.5**	**0.8**	**15.8**	**14.4**	**1.3**	**24.9**	**23.5**	**1.4**	**10.1**	**9.8**	**0.3**	**12.0**	**11.9**	**0.0**	**6.5**	**7.0**	**-0.6**	**8.0**	**8.6**	**-0.5**

PF = Portfolio Return BM = Benchmark Return ER = Excess Return

Total Fund Benchmark

CLIENT SPECIFIC BM AS AT JUNE 2016:

27.2% FTSE All Share 11% FTSE All World North America

9.5% FTSE Developed Europe Ex UK 12% FTSE Developed Asia Pacific

12% FTSE All World Emerging Markets

10% 1/3 FTSE RAFI DEV 1000 QSR Total Return NET & 1/3 MSCI World Minimum Vol Total Return NET & 1/3 MSCI World Quality Total Return NET

Corp Bonds: 10% Barclays Global Agg Corporate Bond HEDGED into GBP

Property: 4.7% Client Specific Index Infrastructure: 3.6% Client Specific Index

Notes: For the Total Fund benchmark the weightings for the Infrastructure and Property will match the actual drawdowns/market values of the funds, then the remainder will be put into UK Passive Equities .

Total Infrastructure and Total Property are measured against a weighted index of the funds underlying benchmarks.

Historic data up to and including 31.03.2016 has been provided by the WM Co and L&G.

Total Fund Reconciliation Analysis
Worcestershire County Council Pension Fund
for Quarter Ended 30th September 2016

Market Value: £2.24bn

	30th June 2016		Net	Total	Total	30th Sept 2016	
	Market Val (£000s)	Exposure (%)	Investment (£000s)	Income (£000s)	Gain/Loss (£000s)	Market Val (£000s)	Exposure (%)
Total Equity Fund	**1,758,842**	**85.0**	**0**	**0**	**164,255**	**1,923,097**	**86.0**
Total Active Equity Fund	567,550	27.4	0	0	75,936	643,486	28.8
Far East Developed Fund - Nomura	316,225	15.3	0	0	42,720	358,945	16.0
Emerging Markets Fund - JPM	119,325	5.8	0	0	16,457	135,782	6.1
Emerging Markets Fund- Schroder	131,999	6.4	0	0	16,759	148,758	6.6
Total Passive Equity Fund	928,887	44.9	0	0	72,342	1,001,228	44.8
UK Equity Fund - L&G	572,371	27.7	0	0	44,692	617,063	27.6
North American Equity Fund- L&G	236,545	11.4	0	0	16,731	253,276	11.3
Europe ex UK Equity Fund- L&G	119,971	5.8	0	0	10,918	130,889	5.9
Total Alternatives Fund	262,406	12.7	0	0	15,978	278,384	12.4
FTSE RAFI DEV Fund - L&G	76,244	3.7	0	0	6,453	82,697	3.7
MSCI World Min Vol TR Fund - L&G	97,468	4.7	0	0	2,441	99,908	4.5
MSCI World Quality TR Fund - L&G	88,694	4.3	0	0	7,084	95,778	4.3
Corporate Bond Fund- JPM	**136,355**	**6.6**	**0**	**0**	**2,930**	**139,285**	**6.2**
Total Property Fund	**99,133**	**4.8**	**-2,409**	**0**	**3,673**	**100,397**	**4.5**
UK Property Fund - VENN	28,198	1.4	-2,409	0	590	26,378	1.2
US Property Fund- Walton Street	7,057	0.3	0	0	205	7,262	0.3
Euro Property Fund- Invesco	63,878	3.1	0	0	2,879	66,757	3.0
Total Infrastructure Fund	**73,990**	**3.6**	**-439**	**0**	**856**	**74,407**	**3.3**
UK Infrastructure Fund - Green	35,439	1.7	0	0	0	35,439	1.6
UK Infrastructure Core Fund - Hermes	38,550	1.9	-439	0	856	38,967	1.7
Cash Fund	**0**	**0.0**	**-2,849**	**0**	**0**	**0**	**0.0**
Worcestershire CC Total Fund	**2,068,320**	**100.0**	**-2,849**	**0**	**171,716**	**2,237,187**	**100.0**

Note: Cashflow into cash refelects sum of portfolio contributions minus net investments. It is assumed that Cash for the Fund is held outside of the invested assets and is therefore withdrawn from the Total Fund

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