

# Essex Pension Fund

## Funding Strategy Statement **2011**

As at 31 March 2011

# Essex Pension Fund

## Funding Strategy Statement 2011

*This Statement has been prepared by Essex County Council (the Administering Authority) to set out the funding strategy for the Essex County Council Pension Fund (the Fund), in accordance with Regulation 35 of the Local Government Pension Scheme (Administration) Regulations 2008 (as amended) and the guidance paper issued in March 2004 by the Chartered Institute of Public Finance and Accountancy (CIPFA) Pensions Panel.*

### 1. Introduction

The Local Government Pension Scheme (Administration) Regulations 2008 (as amended) ("the Administration Regulations") replaced the Local Government Pension Scheme Regulations 1997 (as amended) providing 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 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 Statement of Investment Principles (SIP) for the Fund published under Regulation 12 of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2009;
- The FSS must be revised and published whenever there is a material change in the policy on the matters set out in either the FSS or the SIP.

Benefits payable under the Local Government Pension Scheme (the Scheme) are guaranteed by statute and therefore the pensions promise is secure. 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 Scheme is a defined benefit final salary scheme under which the benefits are specified in the governing legislation (the Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 (as amended) ("the BMC Regulations"). The required levels of employee contributions are also specified in the Regulations.

Employer contributions are determined in accordance with the Regulations (principally Administration Regulation 36) which require that an actuarial valuation is completed every three years by the Actuary appointed by the Fund, including a rates and adjustments certificate. Contributions to the Fund should be set so as to “secure its solvency”, whilst the Actuary must also have regard to the desirability of maintaining as nearly constant a rate of contribution as possible. The Actuary must have regard to the FSS in carrying out the valuation.

## 2. Purpose of the FSS in policy terms

Funding is defined as 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 purpose of this FSS is:

- to establish a clear and transparent fund-specific strategy which will identify how employers' pension liabilities are best met going forward;
- to support the regulatory requirement to maintain as nearly constant employer contribution rates as possible; and
- to take a prudent longer-term view of funding those liabilities.

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 that 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. Funding Objectives and purpose of the Fund

The funding objectives of the Fund are:

- Achieve and then maintain assets equal to 100% of liabilities within reasonable risk parameters
- To determine employer contribution requirements recognising the desirability of maintaining as nearly constant employer contributions as possible
- To have consistency between the investment strategy and funding strategy
- To manage employers' liabilities effectively by the adoption of employer specific funding objectives
- Maintain liquidity in order to meet projected net cash-flow outgoings
- Minimise unrecoverable debt on termination of employer participation

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 scheme benefits, transfer values, costs, charges and expenses,

as defined in the Local Government Pension Scheme (Administration) Regulations 2008 (as amended), the Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 (as amended) and in the Local Government Pension Scheme (Management and Investment of Funds) Regulations 1998 (as amended).

#### 4. Responsibilities of the key parties

Although a number of parties, including investment fund managers, investment advisers and external auditors, have responsibilities to the Fund, the key parties for the strategy are seen as the Administering Authority, each individual employer and the Fund Actuary.

The Administering Authority should:

- collect employer and employee contributions;
- invest surplus monies in accordance with the Regulations;
- ensure that cash is available to meet liabilities as and when they fall due;
- manage the valuation process in consultation with the Fund Actuary;
- prepare and maintain an FSS and a SIP, both after due consultation with interested parties; and
- monitor all aspects of the Fund's performance and funding and amend the FSS/SIP when necessary.

The Individual Employer should:

- deduct contributions from employees' pay correctly after determining the appropriate employee contribution rate (in accordance with BMC Regulation 3)
- pay over all contributions, including their own as determined by the Fund Actuary, promptly by the due date;
- exercise discretions within the regulatory framework;
- make additional contributions in accordance with agreed arrangements in respect of, for example, augmentation of scheme benefits and early retirement strain; and

- notify the Administering Authority promptly of all changes to membership or, other changes proposed, which affect future funding.

The Fund Actuary should:

- prepare valuations, including the setting of employers' contribution rates, after agreeing assumptions with the Administering Authority and having regard to the FSS;
- prepare advice and calculations in connection with bulk transfers and individual benefit-related matters; and
- advise on funding strategy, the preparation of the FSS, and the inter-relationship between the FSS and the SIP.

## 5. Solvency issues and target funding levels

To meet the requirements of the Administration Regulations the Administering Authority's long-term funding objective is to achieve and then maintain assets equal to 100% of projected accrued liabilities, assessed on an ongoing basis including allowance for projected final pay. The actuarial assumptions to be used in the calculation of the funding target are set out in the Appendix.

The key assumptions making up the funding strategy and as adopted for the 2010 actuarial valuation are that:

- our long-term aim is to achieve 100% funding of pension liabilities;
- the Scheme is expected to continue for the foreseeable future;
- favourable investment performance can play a valuable role in achieving adequate funding over the longer term;
- we wish to minimise fluctuations in employers' contributions in order to assist them with their financial planning and to meet their financial responsibilities to the Fund;
- the Fund is relatively immature in terms of its membership profile with a high proportion of contributors and we can therefore take advantage of that fact in setting our investment strategy;
- we have a large number of employing bodies with different characteristics including size and strength of covenant.

The effective date of the current actuarial valuation of the Fund is 31 March 2010. The preliminary results of the valuation indicate that overall the assets of the Fund represented 71% of projected accrued liabilities at the valuation date.

The Administering Authority after due consideration of all of the information available to it including consultation with the Fund Actuary and other interested parties, has adopted the following objectives to achieve the funding target:

- we will set employers' contribution rates to achieve 100% funding of liabilities in the long term;
- employer contribution rates will be made up of two separate elements:
  - an ongoing rate to recover the costs of future service; and
  - a deficit recovery contribution to recover the shortfall revealed by the actuarial valuation;

we will for the purpose of our administration, the calculation of contribution rates and for the setting of maximum deficit recovery periods, deal with town and parish councils (T&PC) as a group;

- the small admitted bodies group (SABG) will be wound up with effect from 1 April 2011. From that date each former member of the group will be treated as a standalone employer in the Fund. As an interim measure, the contributions for the period 1 April 2011 to 31 March 2014 will be calculated on a grouped basis under the previous group rules of operation;
- we will set deficit recovery periods for the T&PC and former SABG that:
  - as far as possible are likely to reduce the level of deficit during the inter-valuation period if all of the Actuary's assumptions prove correct; and
  - safeguard the interests of the Fund by having regard to the strength of covenant and the financial stability of the grouped employers;
- schools, including former grant maintained schools, will be treated as part of the local authority within whose area of responsibility they fall for the purpose of setting contribution rates and deficit recovery periods; any discretions in respect of these matters will fall to the local authority; schools that opt to become academies become stand-alone employers in their own right but inherit responsibility for the share of scheme deficit attributable to the former school(s) from which they were formed and that share of scheme deficit will then be taken into account in calculating their separate contribution rate.

- we will set standard and maximum deficit recovery periods for the remaining employers but will leave them the freedom to decide to repay their share of the deficit over a shorter period should they so choose;
  - the standard deficit recovery periods will be set at levels that safeguard the interests of the Fund by having regard to the Fund's judgement of the strength of covenant and the financial stability of individual employers;
  - individual employers will, at the discretion of the Fund, be able to increase their deficit recovery period up to the maximum deficit recovery period subject to providing assurance of greater strength of covenant and financial stability. (e.g. transferor Scheme employer consent, provision of a bond, a deposit, a parent company guarantee or other surety);
  - no reduction in the level of an employer's contributions will be allowed unless the deficit recovery period adopted by that employer is equal to or less than the standard deficit recovery period.

- The deficit recovery periods for the following employers will be as follows:

Employer Category	Deficit Recovery Period
town and parish councils	30 years (20 year period for purpose of any possible contribution reductions)
Small admission bodies	The average remaining working life of the small admission bodies' group work-forces as at 1 April 2010

- The deficit recovery periods for other employers will be as follows:

Employer Category	Standard Deficit Recovery Period	Maximum Deficit Recovery Period
scheme employers	20 years	30 years
Arms length management organisations of scheme employers	20 years	30 years
care trusts	20 years	30 years
admission bodies working on contracts for scheme employers	The period that the contract still has to run.	30 years
Other admission bodies	The average remaining working life of the employer's work-force as at 1 April 2010	30 years

- that the former small admitted bodies group employers deficit recovery contributions and ongoing rate contributions will be phased in, in steps, over the 6 year period 2011/12 to 2016/17;
- that the T&PC employers will be given the opportunity to phase in the increase in their contributions in steps over the 3 year period 2011/12 to 2013/14;

- On the cessation of an employer's participation in the Scheme, the actuary will be asked to make a termination assessment. Any deficit in the Scheme in respect of the employer would be due to the Scheme as a termination contribution, unless it was agreed by the administering authority and the other parties involved that the assets and liabilities relating to the employer would be transferred within the Scheme to another participating employer. The "least risk" basis of assessment of a termination payment will apply for all admission bodies, except where a successor or guarantor body inherits ongoing responsibility for the orphan liabilities arising on cessation of the admission.
- In certain instances, and in particular for Fund employers which are considered by the Administering Authority to provide a high level of covenant, an allowance may be made as part of the recovery plan for investment performance at a higher level than that assumed for assessment of the **funding target**. This higher level of return assumed will, in particular, reflect the actual investment strategy of the Fund, on the basis that this is to be maintained over the entire recovery period. The assumptions to be used in these Recovery Plan calculations are set out in the Appendix.
- All transferee admission bodies (i.e. "best value" contractors delivering services to scheme employers) should be accepted for admission into the Fund so long as all the necessary regulatory requirements for admission are satisfied. No special conditions or requirements will apply for transferee admission bodies given their ultimately close links with the Scheme Employer, although the Fund retains the right to seek special terms or conditions if these are considered warranted in specific cases.  
In the case of a transferee admission body, or any participating employer acting as guarantor in the case of non-transferee admission bodies, implementation of an alternative funding basis or approach (including on termination) will be subject to agreement from the relevant guarantor body/scheme employer. Any special funding arrangements between the scheme employer and transferee admission body should be covered by the commercial arrangements, i.e. outside the Fund and not part of the admission agreement.
- Community admission bodies will be accepted for participation in the Fund, or otherwise, on a case by case consideration of the merits of admission and the associated risks to the Fund. In general, a guarantee or alternative surety will be required for all community admission body cases, with this requirement waived at the Fund's discretion on an exceptions basis.  
For community admission bodies the Fund will consider application of special conditions or requirements as deemed appropriate. Examples of such conditions are:
  - a guarantee from another Fund employer with sufficient covenant strength
  - a surety bond or other contingent asset
  - an independent review of covenant, including the possibility of a parent guarantee.
 All community admission bodies will be allowed flexibility to elect to adopt a funding approach prior to termination in line with the "least risk" exit debt basis, if that is their preference.



- In the case where a contractor wishes to offer a broadly comparable scheme, rather than apply to become an admitted body of the Fund, standardised bulk transfer terms will be offered via the Actuary's Letter. The letter will be structured so as to target an asset transfer to the contractor's Broadly Comparable scheme such that it is equivalent to 100% of the past service liabilities reserved for by the Fund in respect of the transferring members' accrued service as at the date of transfer. The Fund will only agree to any variations in the standard in exceptional circumstances and with the prior agreement of the transferring scheme employer.

In determining the deficit recovery period(s) the Administering Authority has had regard to:

- the responses made to the consultation with employers on the FSS principles;
- the need to balance a desire to attain the target as soon as possible against the major increases in the level of employers' contributions which a shorter period would require; and
- The Administering Authority's views on the strength of the participating employers' covenants in achieving the objective.

#### 6. Link to investment policy set out in the SIP

The preliminary results of the 2010 valuation show the liabilities to be 71 % covered by the current assets, with the funding deficit of 29 % being covered by future deficit contributions.

In assessing the value of the Fund's liabilities in the valuation, allowance has been made for asset out-performance as described in Section 5, taking into account the investment strategy adopted by the Fund, as set out in the SIP.

It is not possible to construct a portfolio of investments that produces a stream of income exactly matching the expected liability payment stream. However, it is possible to construct a portfolio that closely matches the liabilities and represents the least risk investment position. Such a portfolio would consist of a mixture of long-term index-linked and fixed interest gilts.

Investment of the Fund's assets in line with the least risk portfolio would minimise fluctuations in the Fund's ongoing funding level between successive actuarial valuations.

If, at the valuation date, the Fund had been invested in this portfolio, then in carrying out the valuation it would not be appropriate to make any allowance for out-performance of the investments. On this basis of assessment, the assessed value of the Fund's liabilities at the 2010 valuation would have been significantly higher and the declared funding level would have been correspondingly reduced, to approximately 54%.

Departure from a least risk investment strategy, in particular to include equity investments, gives the prospect that out-performance by the assets will, over time, reduce the contribution requirements or at the minimum contribute to offsetting increases in contributions arising from issues such as increased longevity. The funding target might in practice therefore be achieved by a range of combinations of funding plan, investment strategy and investment performance.

The current benchmark investment strategy, as set out in the SIP, is:

**In preparation for the 2010 valuation process, the Fund's investment consultants, Hymans Robertson, were asked to update the investment expectations for the Fund. The following is a summary of their findings which will in due course be reflected in an updated version of the SIP to be considered by the ISC later in the year:**

**Expected strategic return on assets**

**At 31 March 2010, Hymans Robertson's assumptions with regard to the long term returns on asset classes were:**

<b>Asset class</b>	<b>20 year return (% p.a.)</b>
<b>UK Equity</b>	<b>7.9%</b>
<b>Overseas / Global Equity</b>	<b>7.6%</b>
<b>Private Equity</b>	<b>9.0%</b>
<b>Fixed Interest Gilts</b>	<b>4.7%</b>
<b>Index-linked Gilts</b>	<b>4.5%</b>
<b>Corporate Bonds</b>	<b>5.5%</b>
<b>LIBOR+</b>	<b>5.0%</b>
<b>Property</b>	<b>5.8%</b>
<b>Infrastructure</b>	<b>5.8%</b>

Given the Fund's long term strategic allocation of assets at that time (re-weighting for Private equity) of:

<b>%</b>	
<b>10.0</b>	<b>UK Equity</b>
<b>53.0</b>	<b>Overseas / Global Equity</b>
<b>6.0</b>	<b>Private equity (including activism)</b>
<b>1.2</b>	<b>Fixed Interest Gilts</b>
<b>3.8</b>	<b>Index-Linked Gilts</b>
<b>5.5</b>	<b>Corporate Bonds</b>
<b>6.0</b>	<b>LIBOR + (including Company Loans)</b>
<b>12.0</b>	<b>Property</b>
<b>2.5</b>	<b>Infrastructure</b>

this would imply a long term strategic expected return of 7.0% p.a. on an arithmetic weighted average of these individual returns. This does not take account of any expected return from active management (including currency) or the benefit we might expect from diversification (which we expect to come through as 'bonuses'). Using Hymans Robertson's internal asset model (which, in this case, also does not take account of active management, but does allow for the benefits of diversification) some analysis was performed with respect to various expected returns and the probability of achieving that return. The model (based on the current structure) calculates a central expected return of 7.9% p.a. The overall expected return on a portfolio of assets does not solely reflect the arithmetic weighted average of the returns on the individual asset classes. This is due to diversification i.e. when you combine a portfolio of assets which are not fully correlated to each other, the expected portfolio return is greater than the arithmetic combination of the individual returns. This reflects the lower volatility of the portfolio compared to the volatility of the sum of the parts. This is sometimes referred to as 'volatility drag'.

The probability of achieving particular levels of out-performance relative to the liabilities is as follows:

	<b>1 year</b>	<b>3 years</b>	<b>20 years</b>
<b>Probability of achieving liabilities + 1.0% p.a</b>	<b>57%</b>	<b>63%</b>	<b>77%</b>
<b>Probability of achieving liabilities + 2.5% p.a</b>	<b>53%</b>	<b>56%</b>	<b>62%</b>
<b>Probability of achieving liabilities + 3.5% p.a</b>	<b>50%</b>	<b>52%</b>	<b>51%</b>

The Actuary's current market related assumptions in regard to the 2010 valuation are:

	%
A liability based fixed interest gilt yield of:	4.5
A liability based index linked gilt real yield of:	0.7
Adjustment for inflation risk premium and CPI:	<u>0.8</u>
Therefore implied inflation of:	<u>3.0</u>

His asset out performance assumptions, consistent with previous actuarial valuations are:

<u>Past service liabilities</u>	
Pre-retirement =	gilts + 2.5%
Post – retirement =	gilts + 1%
Total fund =	gilts + 1.9%
 <u>Future service liabilities</u> =	 Inflation + 3.75%

Given the above assumptions as to fixed interest gilt yields and inflation these give the following assumed investment return requirements for the fund relative to conditions as at 31 March 2010:

	%
Past service liabilities = 4.5% + 1.9% =	6.40
Future service liabilities = 3.0% + 3.75% =	6.75

Examination of the Fund Returns expected by Hymans Robertson shows a long term strategic expected return (for the individual asset classes) of 7.0% and a long term strategic expectation for the whole fund allowing for the benefit of diversification of 7.9%.

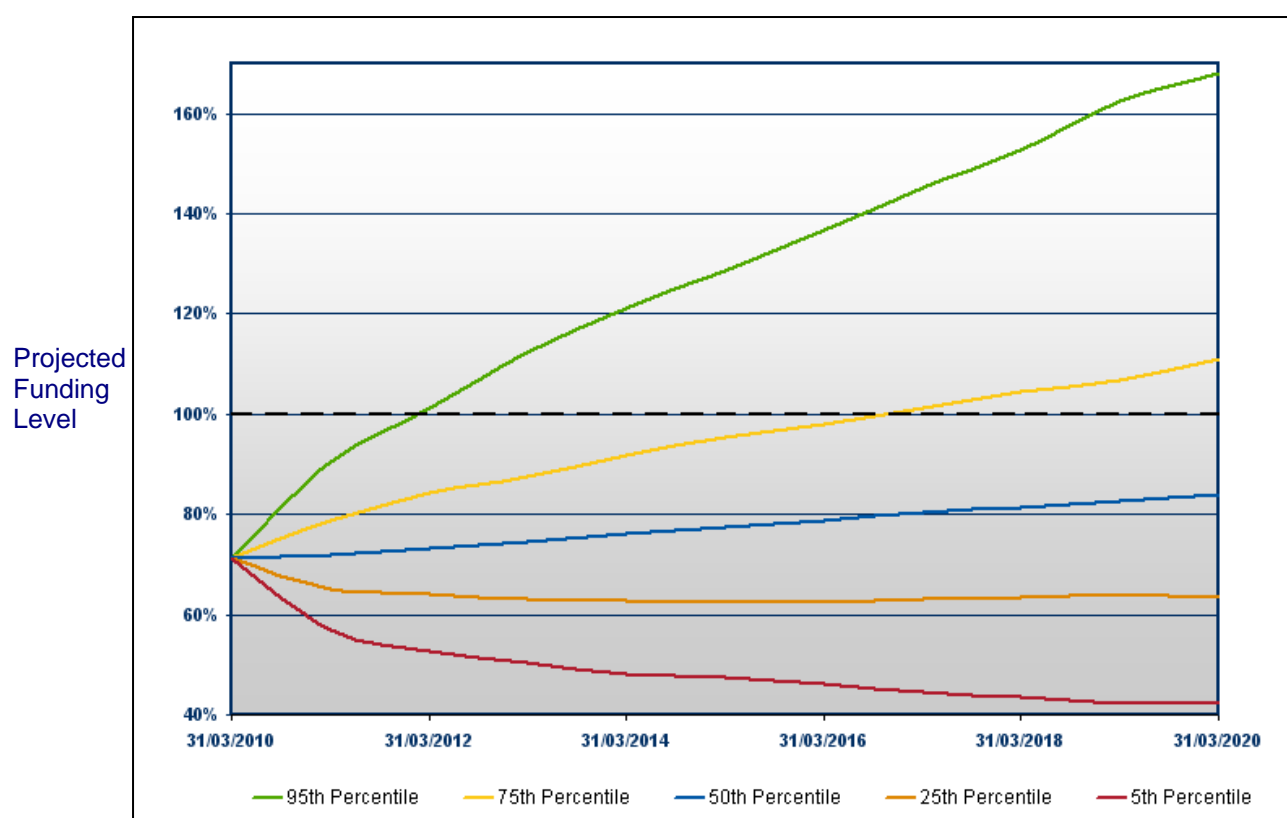
It will be seen that there is a margin between the valuation assumptions required to meet the funding target and the long term investment return expected for the Fund. This gives a degree of comfort in the funding plan, providing a buffer to assist the Fund in riding out periods of adverse experience or other events.

## 7. Identification of risks and counter-measures

Awareness of the risks that may impact on the funding strategy and expectations of future solvency is crucial to determining the appropriate measures to mitigate those risks.

The funding of defined benefits is by its nature uncertain. The funding strategy 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 valuation and beyond. This may require a subsequent contribution adjustment to bring the funding back into line with the target.

The chart below shows a “funnel of doubt” funding level graph, which illustrates the range and uncertainty in the future progression of the funding level, relative to the funding target adopted at the valuation. Using a simplified model, the chart shows the probability of exceeding a certain funding level over a 10 year period from the valuation date. For example, the top line shows the 95th percentile level (i.e. there is a 5% chance of the funding level at each point in time being better than the funding level shown, and a 95% chance of the funding level being lower).



The Administering Authority has itself undertaken an exercise to identify those risks that are specific to the Fund and the measures to be taken to counter those risks.

The resultant risk assessment is attached to this FSS as Schedule A.

## 8. Monitoring and Review

The Administering Authority has taken advice from the Fund Actuary in preparing this Statement, and has also consulted with its institutional investment advisers Hymans Robertson, its independent investment advisers Keith Neale and Tony Hardy and the Pension Fund's Investment Steering Committee.

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 then 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;
- if there have been significant changes to Fund membership, or LGPS benefits;
- if there 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; and
- if there have been any significant special contributions paid into the Fund.

## Essex County Council Pension Fund

## Funding Strategy Risk Analysis

Objectives Area at Risk	Objective at Risk	Description of Risk of not Achieving the Objectives	Possible Actions
<b>Funding Risks</b>			
Funding	Achieve and then maintain assets equal to 100% of liabilities within reasonable risk parameters	Investment markets perform below actuarial assumptions resulting in reduced assets, reduced solvency levels and increased employer contributions	Use of a diversified portfolio which is regularly monitored against targets and reallocated appropriately. At each triennial valuation assess funding position and progress made to full funding. Full annual interim reviews which to allow consideration of the position.
Funding	Achieve and then maintain assets equal to 100% of liabilities within reasonable risk parameters	Market yields move at variance with actuarial assumptions resulting in increases in liabilities, reduced solvency levels and increased employer contributions	Full annual interim reviews which to allow consideration of the position and the continued appropriateness of the funding/investment strategies and to monitor the exposure to unrewarded risks.
Funding	Achieve and then maintain assets equal to 100% of liabilities within reasonable risk parameters	Investment managers fail to achieve performance targets (i.e. ensure funding target assumptions are consistent with funding objectives) which reduces solvency levels and increases required in employers' contributions	Diversified investment structure and frequent monitoring against targets with potential for a change of managers where considered appropriate.
Funding	Achieve and then maintain assets equal to 100% of liabilities within reasonable risk parameters	Mortality rates continue to improve, in excess of the allowances built into the evidence based actuarial assumptions, resulting in increased liabilities, reduced solvency levels and increased employer contributions	Monitoring of mortality experience factors being exhibited by the Fund members by Fund Actuary and consequent variation of the actuarial assumptions based on evidential analysis.
Funding	Achieve and then maintain assets equal to 100% of liabilities within reasonable risk parameters	Frequency of early retirements increases to levels in excess of the actuarial assumptions adopted resulting in increases required in employers' contributions	Employers required to pay capital sums to fund costs for non-ill health cases. Regular monitoring of early retirement (including on the grounds of ill health) experience being exhibited by the Fund members by Fund Actuary and consequent variation of the actuarial assumptions based on evidential analysis. Ensure that employers are made aware of consequences of their decisions and that they are financially responsible.
Funding	To determine employer contribution requirements recognising the desirability of maintaining as nearly constant employer contributions as possible	Failure to apply and demonstrate fairness in the differentiated treatment of different fund employers by reference to their own circumstances and covenant	At each triennial actuarial valuation an analysis is carried out to assess covenant and affordability on a proportional basis. Dialogue with employers wherever possible.
Funding	To determine employer contribution requirements recognising the desirability of maintaining as nearly constant employer contributions as possible	Mismatch in asset returns and liability movements result in increased employer contributions	Diversified investment structure and frequent monitoring against targets to adjust funding plans accordingly through the FSS. Employers are kept informed as appropriate.
Funding	To determine employer contribution requirements recognising the desirability of maintaining as nearly constant employer contributions as possible	Pay and consumer price inflation significantly different from actuarial assumptions resulting in increases required in employers' contributions	At each triennial actuarial valuation an analysis is carried out to ensure that the assumptions adopted are appropriate and monitor actual experience. Discussions with employers over expected progression of pay in the short and long term.
Funding	To determine employer contribution requirements recognising the desirability of maintaining as nearly constant employer contributions as possible	Potential for significant increases in contributions to levels which are unaffordable. Ultimate risk is the possibility of the employers defaulting on their contributions	Risk profile analysis performed with a view on the strength of individual employer's covenant being formed when setting terms of admission agreement (inc bonds) and in setting term of deficit recovery whilst attempting to keep employers' contributions as stable and affordable as possible. Pursue a policy of positive engagement with a view to strengthening employer covenants wherever possible
Funding	To determine employer contribution requirements recognising the desirability of maintaining as nearly constant employer contributions as possible	Adverse changes to LGPS regulations resulting in increases required in employers' contributions or Fund cashflow requirements.	Ensuring that Fund concerns are considered by the Officers/Board as appropriate and raised in consultation process with decision makers lobbied. Employers and interested parties to be kept informed. Monitor potential impact for employers in conjunction with Actuary.

Funding	To manage employers' liabilities effectively by the adoption of employer specific funding objectives	Administering authority unaware of structural changes in an employer's membership, or not being advised of an employer closing to new entrants, meaning that the individual employer's contribution level becomes inappropriate requiring review and increase	Ensure that employers are reminded of their responsibilities, monitor and send reminders of employers responsibilities re this where appropriate, investigate the adoption of an administration strategy to clarify employer responsibilities. Risk profile analysis and officer dialogue with employers concerned (including guarantors as appropriate)
Funding	To manage employers' liabilities effectively by the adoption of employer specific funding objectives	Not recognising opportunities from changing market, economic or other circumstances (e.g. de-risking or strengthening of covenant)	At each triennial valuation pursue a policy of positive engagement with a view to strengthening employer covenants wherever possible.
Funding	To manage employers' liabilities effectively by the adoption of employer specific funding objectives	Adoption of either an inappropriately slow or rapid pace of funding in the specific circumstances for any particular employer	At each triennial actuarial valuation an analysis is carried out to assess covenant and affordability on a proportional basis. Dialogue with employers wherever possible.
Funding	To manage employers' liabilities effectively by the adoption of employer specific funding objectives	Failure to ensure appropriate transfer is paid to protect the solvency of the Fund and equivalent rights are acquired for transferring members in accordance with the regulations.	Follow the standardised approach to bulk transfers of liabilities as part of admission policy framework, complying with any statutory requirements and protecting the interests of the Fund's employers by measuring the solvency of the Fund and relevant employers before and after transfer.
Funding	To have consistency between the investment strategy and funding strategy	Over or under cautious determination of employer funding requirements due to inconsistent approach or failing to recognise the impact of the investment strategy on funding	Measurement will look at expected return projections vs actuarial assumptions in order to test the continued appropriateness and consistency between the funding and investment strategy.
Funding	Maintain liquidity in order to meet projected net cash-flow outgoings	Illiquidity of certain markets and asset classes and difficulty in realising investments and paying benefits as they fall due	Holding liquid assets and maintain positive cashflows. Reviews performed to monitor cashflow requirements
Funding	Maintain liquidity in order to meet projected net cash-flow outgoings	Unanticipated onset of cash-flow negative position, potentially requiring ad hoc repositioning of assets	Holding liquid assets and maintain positive cashflows. Reviews performed to monitor cashflow requirements
Funding	Minimise unrecoverable debt on termination of employer participation	An employer ceasing to exist with insufficient funding, adequacy of bond or guarantee. In the absence of all of these, the shortfall will be attributed to the Fund as a whole with increases being required in all other employers' contributions	Assess the strength of individual employer's covenant and/or require a guarantee when setting terms of admission agreement (inc bonds) and in setting term of deficit recovery. Annual monitoring of risk profiles and officer dialogue with employers concerned (including guarantors as appropriate) through traffic light analysis. Positive dialogue with employers with a view to strengthening employer covenants wherever possible
Funding	Minimise unrecoverable debt on termination of employer participation	Failure to monitor leading to inappropriate funding strategy and unrecovered debt on cessation of participation in the fund	Assess the strength of individual employer's covenant in conjunction with the Actuary and/or require a guarantee when setting terms of admission agreement (inc bonds) and in setting term of deficit recovery. Annual monitoring of risk profiles and officer dialogue with employers concerned (including guarantors as appropriate) through traffic light analysis. Positive dialogue with employers with a view to strengthening employer covenants wherever possible



## Actuarial Valuation as at 31 March 2010

### Method and assumptions used in calculating the funding target

#### Method

The actuarial method to be used in the calculation of the 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 scheme 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, an alternative method is adopted (The Attained Age method), which makes advance allowance for the anticipated future aging and decline of the current closed membership group.

#### Financial assumptions

##### Investment return (discount rate)

A yield based on market returns on UK Government gilt stocks and other instruments which reflects a market consistent discount rate for the profile and duration of the Scheme's accrued liabilities, plus an Asset Out-performance Assumption ("AOA") of 2.5% p.a. for the period pre-retirement and 1% p.a. post-retirement.

The asset out-performance assumptions represent the allowance made, in calculating the funding target, for the long term additional investment performance on the assets of the Fund relative to the yields available on long dated gilt stocks as at the valuation date. The allowance for this out-performance is based on the liability profile of the Scheme, with a higher assumption in respect of the "pre-retirement" (i.e. active and deferred pensioner) liabilities than for the "post-retirement" (i.e. pensioner) liabilities. This approach thereby allows for a gradual shift in the overall equity/bond weighting of the Fund as the liability profile of the membership matures over time.

##### Individual Employers

Having determined the AOAs as above for the Fund overall, it is important to consider how the financial assumptions in particular impact on individual participating employers. As employers in the Fund will have different mixes of active, deferred and pensioner members, adopting a different pre/post retirement investment return approach is equivalent to hypothecating a different equity/bond mix investment strategy for each employer. Such an approach would be inconsistent with the Fund practice, as set out in the FSS, of allocating investment performance pro rata across all employers based on a "mirror image" investment strategy to the whole Fund. In completing the calculations for individual employers therefore, a single, composite, pre and post retirement asset out-performance assumption of 1.5% pa has been calculated which, for the Fund as a whole, gives the same value of the funding target as the separate pre and post retirement AOAs.

## Inflation

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 Scheme's accrued liabilities, but subject to the following two adjustments:

- an allowance for supply/demand distortions in the bond market is incorporated, and
- an allowance for retirement pensions being increased annually by the change in the Consumer Price Index rather than the Retail Price Index, as announced in June 2010. This change will apply from April 2011 and the assumptions make due allowance for this revision as advised by the Actuary.

The overall reduction to the market's expectation for long term RPI inflation at the valuation date is 0.8% per annum.

## Salary increases

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.

## Pension increases

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. Guaranteed Minimum Pensions in respect of service prior to April 1997).

## Mortality

The mortality 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) Bureau, making allowance for future improvements in longevity and the characteristics of the scheme. The mortality tables used are set out below, with an adjustment reflecting the specific characteristics of the EPF membership. The derivation of the mortality assumption is set out in a separate paper as supplied by the Actuary.

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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 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 longevity 'improvements' year on year in the future in line with the CMI projections, allowing for longer term improvements to be 1% per annum.

## Method and assumptions used in calculating the cost of future accrual

The cost of future accrual (normal cost) will be calculated using the same actuarial method and assumptions as used to calculate the funding target except that the financial assumptions adopted will be as described below.

The financial assumptions for assessing the future service contribution rate should take account of the following points:

- contributions will be invested in market conditions applying at future dates, which are unknown at the effective date of the valuation, and which are not directly linked to market conditions at the valuation date; and
- the future service liabilities for which these contributions will be paid have a longer average duration than the past service liabilities.

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 return (i.e. return in excess of price inflation) of 3.75% per annum, with a long term average assumption for price inflation of 3.0% per annum. These two assumptions give rise to an overall discount rate of 6.75% p.a.

Adopting this approach the future service rate is not subject to variation solely due to different market conditions applying at each successive valuation, which reflects the requirement in the Regulations for stability in the “Common Rate” of contributions. In market conditions at the effective date of the 2010 valuation this approach gives rise to a more optimistic stance in relation to the cost of accrual of future benefits compared to the market related basis used for the assessment of the funding target.

At each valuation the cost of the benefits accrued since the previous valuation will become a past service liability. At that time any mismatch against gilt yields and the asset out-performance assumptions used for the funding target is fully taken into account in assessing the funding position.

## Summary of key whole Fund financial assumptions used for calculating funding target and cost of future accrual (the “normal cost”) for the 2010 actuarial valuation

Long-term gilt yields	
Fixed interest	4.5% p.a.
Index linked	0.7% p.a.
Adjustment for CPI and IRP	0.8% p.a.
Implied CPI price inflation	3.0% p.a.
Past service Funding Target financial assumptions	
Investment return pre-retirement	7.0% p.a.
Investment return post-retirement	5.5% p.a.
Salary increases	4.5% p.a.
Pension increases	3.0% p.a.
Future service accrual financial assumptions	
Investment return	6.75% p.a.
CPI price inflation	3.0% p.a.
Salary increases	4.5% p.a.
Pension increases	3.0% p.a.

## Demographic assumptions

The mortality tables adopted for this valuation are as follows:

	Table	Adjustment
Males normal health pensioners	S1PMA CMI_2009_M [1%]	91%
Female normal health pensioners	S1PFA CMI_2009_F [1%]	85%
Males ill health pensioners	As for male normal health pensioners +3 years	
Female ill health pensioners	As for female normal health pensioners +3 years	
Male dependants	S1PMA CMI_2009_M [1%]	110%
Female dependants	S1DFA CMI_2009_F [1%]	93%
Male future dependants	S1PMA CMI_2009_M [1%]	96%
Female future dependants	S1DFA CMI_2009_F [1%]	89%

Other demographic assumptions are noted below:

Withdrawal	As for 2007 valuation
Other demographics	Based on LG scheme specific experience.

## Assumptions used in calculating contributions payable under the recovery plan

The contributions payable under the recovery plan are calculated using the same assumptions as those used to calculate the **funding target**, with the exception that, for certain employers, the required contributions are adjusted to allow for the following variation in assumptions during the period of the recovery plan:

### Investment return on existing assets and future contributions

An overall additional return of 3.0% pa above the liabilities consistent gilt yield (4.5% pa effective as at the valuation date) reflecting the underlying investment strategy of the scheme and, in particular, including the assets of the scheme that underlie the pensioner as well as the non-pensioner liabilities. This is equivalent to a total rate of investment return of 7.5% pa effective as at the 2010 valuation date.

The investment return assumed for the contributions under the recovery plan is taken to apply throughout the recovery period. As a result, any change in investment strategy which would act to reduce the expected future investment returns could invalidate these assumptions and therefore the funding strategy.

The above variation to assumptions in relation to the recovery plan can only be applied for those employers which the Administering Authority deems to be of sufficiently high covenant to support the anticipation of investment returns, based on the current investment strategy, over the entire duration of the recovery period. No such variation in the assumptions will apply in any case to any employer which does not have a funding deficit at the valuation (and therefore for which no recovery plan is applicable). Where the variation in the assumptions does apply, the resultant total contributions implemented following the 2010 valuation will be subject to a minimum of both:

- the contributions originally planned for 2011/12 onwards based on the 2007 actuarial valuation, and
- the normal future service contribution rate for the employer concerned.