Actuarial Valuation at 31 March 2010

London Borough of Southwark Pension Fund

30 March 2011

Prepared for

London Borough of Southwark
The Administering Authority of the London Borough of Southwark Pension Fund

Prepared by

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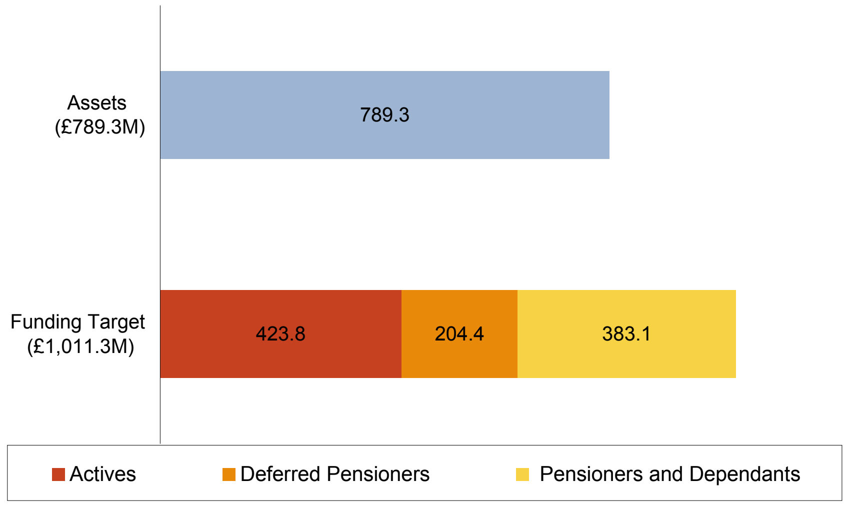
Executive Summary

Valuation results

The financial position of the Fund was assessed against the **funding target** at 31 March 2010.

There is a shortfall of £222.0M relative to the funding target (i.e. the level of assets agreed by the Authority and the Actuary as being consistent with the Funding Strategy Statement appropriate to meet member benefits, assuming the Fund continues as a going concern).



Contribution rates

The aggregate Employer **future service contribution rate** is calculated to be 13.6% of Pensionable Pay.

The aggregate Employer contribution rate required to restore the **funding ratio** to 100%, using a recovery period of 23 years from 1 April 2011 is calculated to be 20.5% of Pensionable Pay assuming membership numbers remain broadly stable and Pensionable Pay increases in line with our assumptions. The comparable figure at the previous valuation was 17.7% of Pensionable Pay (based on a recovery period of 18 years) after allowing for the short term additional asset return assumption.

Rates of contributions payable by each Employer may differ, because they take into account their particular membership profiles and **funding ratios** and the assumptions and **recovery periods** are specific to their circumstances.

Table of Contents

1. Introduction

Formal valuation

We have carried out an actuarial valuation of the London Borough of Southwark Pension Fund at 31 March 2010, as required by Regulation 36 of the Local Government Pension Scheme (Administration) Regulations 2008.

The main purpose of the valuation exercise is to review the financial position of the Fund and to recommend the contribution rates payable to the Fund in the future (which is essentially a **planning exercise**).

The valuation process includes setting assumptions. Such matters were considered before this report was produced and are only discussed briefly in this report.

Defined contribution benefits

Throughout the body of this report we have excluded the assets for defined contribution ('DC') **AVC** accounts from both the assets and from the liability measures, because in our view this provides a clearer picture. If they were to be included it would make no difference to the absolute level of **shortfall**, but it would increase slightly the percentage **funding ratios** from those shown in the main body of this report. Similarly we have excluded **AVCs** from the contribution rates given in this report.

A snapshot view

The report concentrates on the Fund's financial position at the Valuation Date. As time moves on, the Fund's finances will fluctuate. If you are reading this report some time after it was produced, the Fund's financial position could have changed significantly.

Words used

Our report includes some technical pension terms. The words shown in bold print are explained further in the glossary and in section 4.

For brevity, we have also used the following shorthand:

Shorthand	What it means
Authority	London Borough of Southwark, in its role as the Administering Authority
Pensionable Pay	As defined in the Benefits Regulations
Pensionable Service	Periods of membership, as defined in the Benefits Regulations
Benefits Regulations	The Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 (as subsequently amended)
1997 Regulations	The Local Government Pension Scheme Regulations 1997 (as subsequently amended)
Administration Regulations	The Local Government Pension Scheme (Administration) Regulations 2008 (as subsequently amended)
Transitional Regulations	The Local Government Pension Scheme (Transitional Provisions) Regulations 2008 (as subsequently amended)
Regulations	The 1997 Regulations, Benefits Regulations or Administration Regulations as appropriate
Fund	London Borough of Southwark Pension Fund
Employers	All bodies with employers participating in the Fund
Valuation Date	31 March 2010

Legal and actuarial framework	The report was commissioned by and is prepared solely for the Authority. It meets professional guidance requirements. Please see Appendix A "Legal and Actuarial Framework" for further details.

2. What's Happened Since the Previous Valuation

Purpose of section

This section summarises what has happened since the previous valuation.

Headlines from previous valuation

The previous valuation at 31 March 2007 revealed that:

- There was a **shortfall** of £163.1M relative to the **Funding Target** for that valuation. This corresponded to a **funding ratio** of 82%
- The aggregate Employer **future service contribution rate** was 14.5% of Pensionable Pay.

After allowing for short term assumed additional investment returns for some Employers and additional contributions to restore the **funding ratio** to 100% over a period of 18 years from 1 April 2008, the aggregate Employer contribution rate was calculated to be 17.7% of Pensionable Pay. This contribution rate assumed that pensionable payroll would increase in line with our salary increase assumption. (Additional amounts were also payable by Employers where **strains** occurred on early retirement).

Following discussion of these results, the Authority agreed that Employers could phase in the new contribution rates by use of up to three annual steps.

London Borough of Southwark has paid the following rates of contribution (expressed as a percentage of Pensionable Pay) since the previous valuation:

Year commencing 1 April 2007	16.3%
Year commencing 1 April 2008	16.8%
Year commencing 1 April 2009	17.3%
Year commencing 1 April 2010	17.8%

The formal report dated 28 March 2008 signed by Chris Archer FIA and Tim Lunn FIA of Hewitt Bacon & Woodrow Limited includes further information.

Key developments

The financial health of the Fund depends fundamentally on how much cash is paid in, how well the assets perform and are expected to perform, and on what benefits are paid out and are expected to be paid out. The key developments since the previous valuation therefore include:

- The amount of contributions paid to the Fund.
- The actual returns on the Fund's investments.
- Any changes to future expectations of benefit payments or investment returns.

Contributions

Contributions were paid to the Fund as described above. These exceeded the cost of benefit accrual and so have acted to improve the position. Further details are provided in section 6.

Investment returns

Investment returns have been lower than anticipated which have acted to worsen the position since the last valuation.

Future expectations of benefit payments and investment returns

Investigations have generally shown faster than anticipated improvements in longevity, which have increased the future expected durations of benefit payments.

Some significant benefit changes were made with effect from 1 April 2008. These were taken into account in the previous valuation.

In the Emergency Budget in June 2010, the Chancellor announced a change to the inflation indexation of pensions and deferred pensions for all Public Sector pension schemes, including the Local Government Pension Scheme. In future, pensions will be linked to increases in the Consumer Prices Index (CPI) rather than the Retail Prices Index (RPI) as previously. We have allowed for this change in this valuation.

A key aspect over the last three years was the deterioration in the economic environment which has materially affected assumed future investment returns. The impact of this is discussed later in this report.

Benefits Payable under Discretionary Compensation Regulations

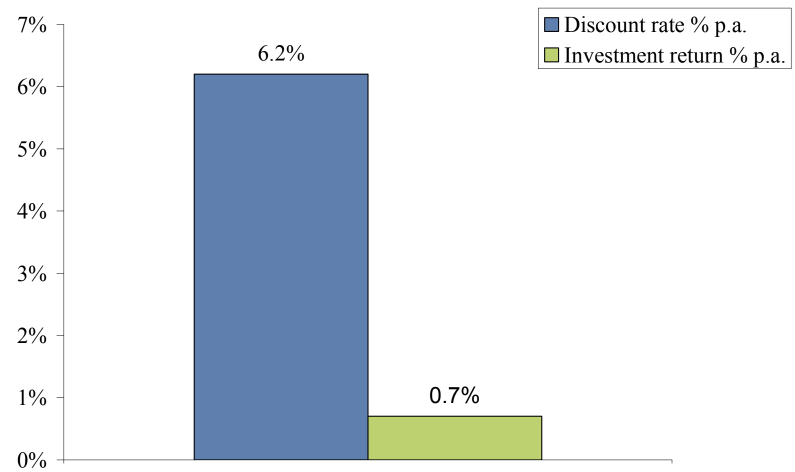
Regulation 12B of the Benefits Regulations gives power to the employing authorities to make a resolution to increase the "total membership" in the Scheme to reflect the compensation awarded under earlier "Discretionary Compensation Regulations" (as defined in the Regulations) which have previously been paid on a "pay as you go" approach. We understand that London Borough of Southwark made such a resolution and the contributions set out in this report reflects the increased contributions payable by London Borough of Southwark towards those benefits.

Financial development

A variety of factors affect the financial position of the Fund, including investment returns, changes in the anticipated investment returns as indicated by yields on long dated gilts, pension increases and pay increases. To illustrate the Fund's financial development since the previous valuation, we have compared in the charts below:

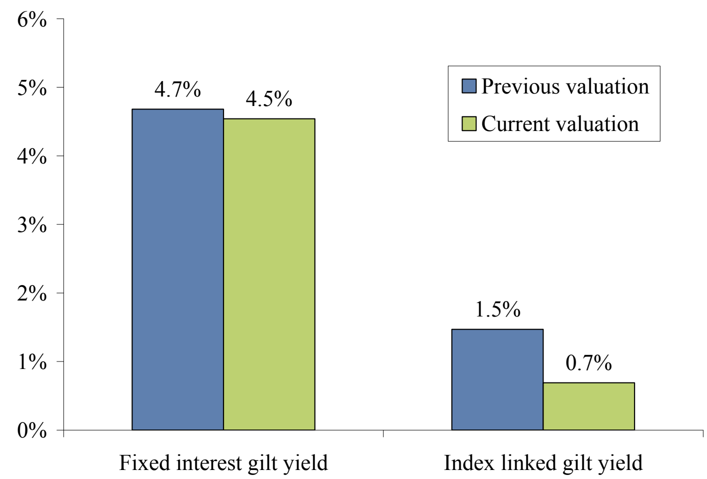
- The investment return achieved on the Fund's assets with the **discount rate** used at the previous valuation to calculate the **funding targets** for Scheduled Bodies (which make up the bulk of the Fund's liabilities).
- The yield on long dated index linked government stocks (gilts) and fixed interest gilts at the previous valuation with the yields at this valuation.
- The assumptions made at the previous valuation for pension and pay increases with what actually happened.

Key experience items – investment returns



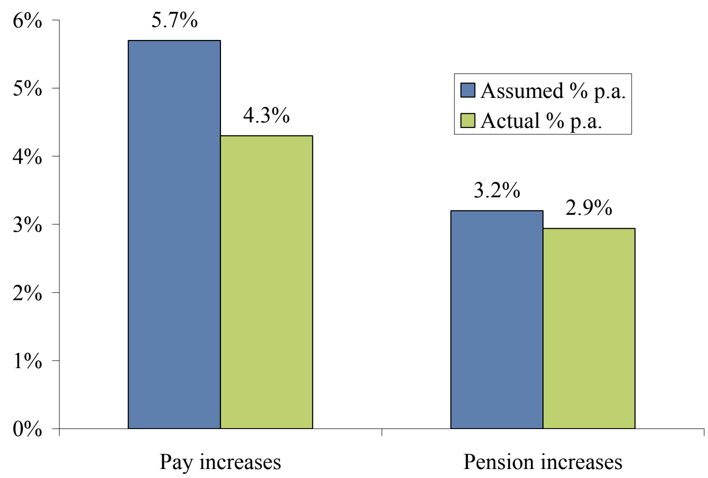
The investment return has been significantly lower than the **discount rate** assumed due to the poor performance of the investment markets.

Key experience items – gilt yields



The yield on long dated fixed interest gilts at the Valuation Date is broadly the same as at the previous Valuation Date. However the yield on index linked gilts has fallen in absolute terms and relative to fixed interest gilt yields leading to an increase in implied price inflation.

Key experience items – pay and pension increases



Increases to pay and pensions in payment were slightly lower than assumed. Note that the pay analysis above includes the impact of promotional pay increases.

Impact on results

Where material, the estimated financial impact of the developments described in this section is shown in section 6.

3. Information Used

Key information

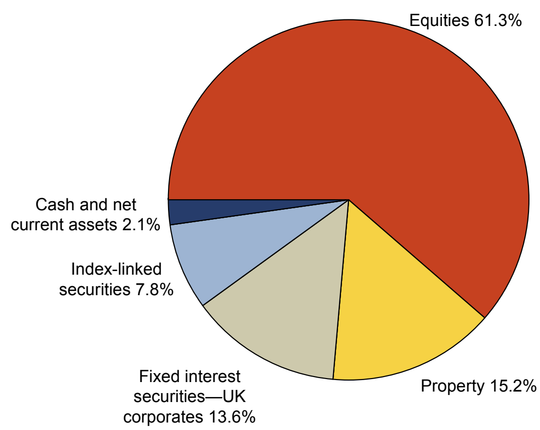
To carry out the valuation, we have obtained information on:

- The assets held by the Fund.
- How benefit entitlements are calculated.
- Member data.

This section sets out a high level summary of the information used. Further details are included in Appendices B, C, D, and E.

Assets

The Fund's assets had an audited market value of £786.8M (excluding AVC accounts) at the Valuation Date, split as follows:



For further details, please see Appendix B.

For the purposes of our valuation we have adjusted the assets by £2.5M in respect of **strain** payments due to be paid after the Valuation Date in respect of early retirements on redundancy, retirement or ill-health before the age of 60 that occurred before the Valuation date. This data was provided to us by the Authority.

We have therefore taken the market value of assets for the purposes of our valuation to be £789.3M (excluding AVC accounts) at the Valuation Date.

Benefits valued

Members are entitled to benefits defined in the Regulations. A summary of the benefits taken into account in this valuation is set out in Appendix C.

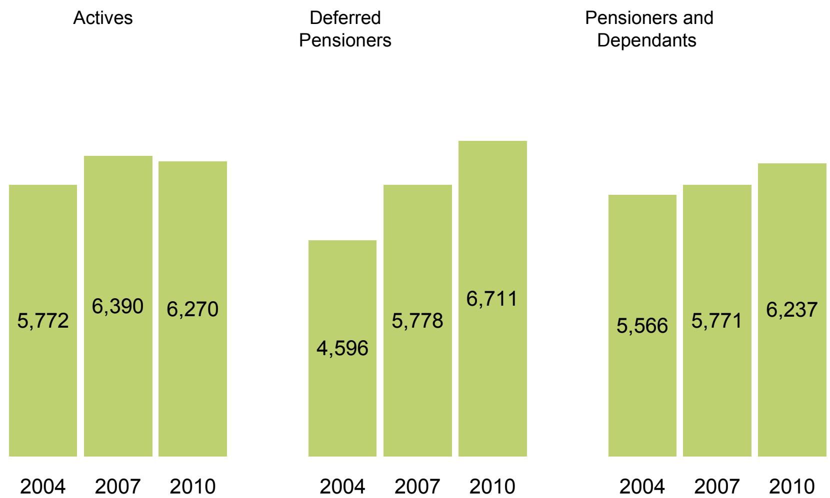
Employers within the Fund have discretion over payment of certain benefits. It is not practical to make allowance for the policies of each Employer in this regard. However, because most of the benefits which are discretionary are financed as they occur, the financial impact on this valuation is minimal. We have therefore made no specific allowance for these discretions.

For the purposes of this valuation, we have assumed that members will remain in the contribution band to which they are currently allocated. Members' current contribution band was supplied to us in the membership data.

Membership data

The valuation calculations use membership data supplied by London Borough of Southwark at 31 March 2010.

The following chart illustrates how the membership profile is evolving. Please see Appendices D and E for more comprehensive summaries. This summary does not include members with compensation pensions which have previously been paid on a "pay as you go" approach (see Section 2 for more details).



Reliability of information

We have carried out some general checks to satisfy ourselves that:

- The information used for this valuation is sensible compared with the information used for the previous valuation and also with that shown in the Fund's Annual Report and Accounts.
- The results of this valuation can be traced from the results of the previous valuation.

However, the results in our report rely entirely on the accuracy of the information supplied. If you believe the data we have used may be incomplete or inaccurate, please let us know.

4. Funding Target — The Principles

Terms used in this report

Here is a summary of the main terms used in this report. Further details are set out in the Glossary:

Summary of Terms

Funding principle	To hold sufficient and appropriate assets to meet the benefits as they fall due.
Funding target	The target level of assets that the Actuary and Authority have agreed is appropriate to meet promised benefits.
Funding objective	To hold sufficient and appropriate assets to meet the **funding target.**
Funding Strategy Statement	A written statement of the Authority's policy for meeting the **funding principle**. The Actuary must have regard to the Funding Strategy Statement in carrying out this valuation.
Recovery plan	A plan of action for correcting a **surplus** or **shortfall** over an agreed period.
Rates and Adjustments Certificate	A certificate setting out what contributions are payable by each Employer over the three years from 1 April 2011.

Four principles

The Actuary and the Authority have agreed the following four principles:

Principle 1—What funding target to use

To calculate the **funding target**:

- For each year into the future, the benefits paid out by the Fund are estimated.
- A target level of assets is agreed on, that is appropriate to meet the expected benefit payments. The conventional approach here is to 'discount back' the expected benefit payments to the Valuation Date, using an agreed rate of interest known as the **discount rate**.

These two steps require a method to be chosen and assumptions to be made (e.g. how long members live) in order to arrive at a value for the **funding target.** The method and assumptions used for the **funding target** are shown in section 5.

Principle 2—What contributions to pay for future benefits

There are several funding methods recognised by the actuarial profession. These result in different calculations of the **future service contribution rate.** The funding methods used are set out in section 5 and explained in the Glossary.

Principle 3—How to address any surplus or shortfall

As the third principle requiring agreement, a decision must be taken on how any **surplus or shortfall** is addressed. Details of the agreed approach are given in section 5.

Principle 4 – How to allow for unanticipated strains on the Fund

As the fourth principle requiring agreement, a decision must be taken on how any **strains** arising as a result of events such as early retirement will be dealt with. Details of the agreed approach are given in section 9 and in Appendix L.

5. Funding Target — Method and Assumptions

Purpose of section

Building on the previous section which set out the principles to be agreed, this section fills in some of the key details of the method and assumptions used for the **funding target,** the **future service contribution rate** and the **recovery plan**. These have been agreed by the Authority. The assumptions are expanded further in Appendix F.

We also describe where the approach taken for this valuation differs from that used for the previous valuation. For the purpose of this report, Scheduled Bodies include all Employers participating in the Fund which are not Admission Bodies.

Key financial assumptions

Here is a summary of the key financial assumptions. In our opinion these are compatible with taking the assets at market value.

Assumption	This valuation (% p.a.)	Previous valuation (% p.a.)	Comments on assumptions for this valuation
Long dated gilt yields			
▪ Fixed interest gilts	4.5	4.7	For this valuation, derived from Bank of England yield curves at duration appropriate for the Fund's liabilities. For the previous valuation the yields were derived from the gross redemption yield on published indices.
▪ Index linked gilts	0.7	1.5	
Price inflation			
▪ Retail Prices Index (RPI)	3.8	3.2	This has been set using the level of inflation implied by the gilt markets at the Valuation Date (as measured by the above gilt yields).
▪ Consumer Prices Index (CPI)	3.3	n/a	This has been set as 0.5% p.a. lower than the RPI. This deduction has been set having regard to the estimated difference between RPI and CPI (over 20 years as at 31 March 2010) arising from the difference in the calculation approach between the two indices. Note that this estimate will vary from time to time.
Pension increases			
▪ Pensions in excess of **GMPs**	3.3	3.2	For this valuation this is equal to the CPI price inflation assumption above.
▪ **GMPs** accrued after 5 April 1988	2.7	2.7	This is based on the CPI price inflation assumption above, an assumption about how much price inflation varies each year, and the interaction of price inflation with the maximum annual increase of 3% p.a.
▪ **GMPs** accrued before 6 April 1988	0	0	

Assumption	This valuation (% p.a.)	Previous valuation (% p.a.)	Comments on assumptions for this valuation
General pay increases	5.3	4.7	Assumed to be average future assumed RPI prices inflation plus 1.5% p.a.
Discount rate – in service			
▪ Scheduled Bodies	7.0	6.2	For this valuation this is equal to the yield on long dated gilts, plus 2.5% p.a.
▪ Admission Bodies	6.25	6.2	For this valuation this is equal to the yield on long dated gilts, plus 1.75% p.a.
Discount rate – left service			
▪ Scheduled Bodies	7.0	6.2	For this valuation this is equal to the yield on long dated gilts, plus 2.5% p.a.
▪ Admission Bodies	4.75	5.2	For this valuation this is equal to the yield on long dated gilts, plus 0.25% p.a.

Rationale for discount rate

The **discount rate** for Scheduled Bodies has been set having regard to the expected return on the Fund assets and the long term financial standing of these bodies. The Fund assets are considered to have a better than evens chance of delivering investment returns in excess of the Scheduled Body **discount rate.**

For Admission Bodies, the **discount rate** has regard to the possibility that participation might cease at any time and anticipates a move to a low risk investment portfolio made up of long dated gilts (of appropriate nature and term) at cessation.

Where a Scheduled Body has agreed to **subsume** the liabilities of the Admission Body at cessation, the Actuary and the Authority have agreed to use the Scheduled Body **discount rate** for that Admission Body. Details of Admission Bodies to which this applies are given in Appendix H.

Key demographic assumptions

The key demographic assumption is member mortality, to which the **funding target** can be particularly sensitive.

Since the previous valuation, research has generally shown that life expectancy is improving much faster than previous research envisaged.

The mortality assumptions have been revised in light of this taking into account the results of a review into the Fund's pensioner mortality experience. A 65 year old male pensioner in normal health is now assumed on average to live to 86.0 (rather than 85.2 at the previous valuation). And a 65 year old female pensioner in normal health is assumed on average to live to 90.7 (rather than 88.3).

In view of the importance of the mortality assumption, this assumption will need to be carefully monitored in future.

What's changed since previous valuation

The assumptions differ from those used for the previous valuation:

- The financial assumptions have been updated to reflect movements in gilt yields.
- An assumption for CPI price inflation has been made (this was not relevant for the previous valuation).
- The **discount rate** used for Scheduled Bodies has increased relative to gilt yields. This is to meet the principle set out in the **Funding Strategy Statement** of maintaining as nearly constant an overall contribution rate as possible.
- The in service **discount rate** used for Admission Bodies has increased relative to gilt yields, whilst the left service **discount rate** has reduced slightly. This is to reflect better the anticipated returns resulting from the anticipated move to a low risk investment portfolio on cessation.
- The mortality assumptions have been changed to allow for research that suggests people are living longer and reflects a review of the Fund's pensioner mortality experience over the period since the previous valuation.
- The assumption determining how much of their pension members choose to convert for cash at retirement has been reduced slightly for future service. This reflects a review of the Fund's actual experience since the previous valuation.
- The allowance for future withdrawals from service with deferred pension entitlement has been adjusted slightly for females following a review of the experience.
- The allowance for administration expenses in the future service rate has been reduced from 0.8% p.a. to 0.6% p.a. following a review of the actual expenses incurred over the valuation period.

Overall, these changes result in a lower overall **funding target**, i.e. they decrease the value placed on the Fund's liabilities compared with the previous valuation. However some Employer specific funding targets may be higher.

Where likely to be material, the overall financial impact of these changes is shown in section 6.

Funding method

As for the previous valuation, the **Projected Unit Method** with a one year control period has been used for most Employers to calculate the **funding target** and the **future service contribution rate**. The **Attained Age Method** has been used for some Employers who do not permit new employees to join the Fund.

In each case no explicit allowance for new entrants has been made.

The resulting **future service contribution rate** can be expected to be broadly stable if

- Experience matches the assumptions underlying the **funding target.**
- The Fund remains closed for those Employers for whom the **Attained Age Method** has been used.

- The membership profile remains stable for those Employers for whom the **Projected Unit Method** has been used.
- Everything else remains the same.

However the following additional influences on the **future service contribution rate** are anticipated:

- Assumed chronological improvements within the life expectancy assumptions incorporated in this valuation can be expected to result in a gradual drift upwards.
- The gradual removal of the right to retire early on unreduced pension (if age 60 or over and age plus service is greater than or equal to 85 years) can be expected to gradually reduce the **future service contribution rate**, as the proportion of members with these enhanced retirement rights reduces.
- The impact of an ageing workforce for those Employers closed to new members is expected to gradually increase the **future service contribution rate** for these Employers.

Additionally if the **funding target** changes the contribution rates are likely to change.

Addressing the shortfall

The Actuary and the Authority have agreed that the **shortfall** relative to the **funding target** at this valuation will be removed through payment of additional contributions by Employers over a range of different recovery periods of up to 23 years. The recovery period used for each Employer is set out in Appendix H.

The assumptions used to calculate the additional contributions are the same as those used for calculating the **funding target**.

Changes to funding objectives

The **funding principle** for this valuation is to hold sufficient and appropriate assets to meet the benefits as they fall due. The **funding objective** is to hold sufficient and appropriate assets to meet the **funding target**. The Actuary and the Authority have agreed that the **funding target** is an appropriate level of assets to hold in order to meet this **funding principle**.

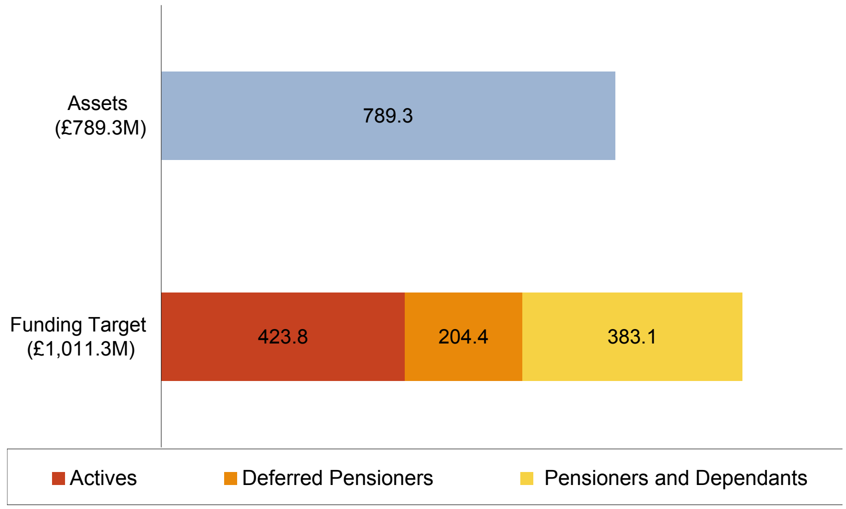
This is a similar approach to the funding principle and the **funding objective** in the previous valuation. However, we would draw your attention to the following changes in approach:

- There have been changes to the assumptions used, as summarised in this section.
- The maximum period over which the **shortfall** is addressed is now 23 years - previously it was 18 years.

6. Funding Target — Results

Funding target

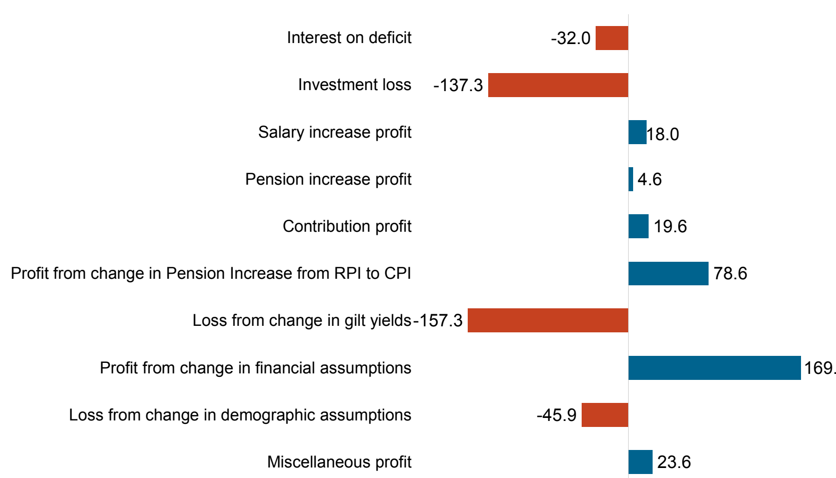
The chart below compares the market value of the assets to our calculation of the **funding target**, using the assumptions agreed with the Authority.



The **shortfall** of the assets relative to the **funding target** is £222.0M. This corresponds to a **funding ratio** of 78%. Please note that the above funding target does not include the additional liability resulting from the conversion of discretionary compensation pensions (which have previously been paid on a "pay as you go" approach) to funded pensions. Further detail on this is set out in Section 2.

Explanation of change

The funding position has worsened by £58.9M since the 2007 valuation (which had a **shortfall** of £163.1M), explained approximately as follows:



The figures in this chart are in £M. The analysis shows that the main factors affecting the funding position since the previous valuation are:

- The change in pension indexation from RPI to CPI and the change in the **discount rate** relative to gilt yields (included in the 'changes in financial assumptions' bar) which have acted to improve the position.
- The actual returns on the Fund assets, the reduction in gilt yields, and changes to the mortality assumption, which have acted to worsen the position.

Future service contribution rate

We have also calculated the aggregate Employer **future service contribution rate.** This is the rate of Employer contribution that would normally be appropriate if the Fund had no **surplus** or **shortfall** and the assets were exactly equal to the **funding target**.

	% of Pensionable Pay
New final salary benefits	19.3
Death in service lump sum	0.4
Administration expenses	0.6
Less employee contributions	(6.7)
Net Employer cost	**13.6**

Explanation of change

The future service rate has reduced by 0.9% of Pensionable Pay since the previous valuation.

The main factors affecting the **future service contribution rate** since the previous valuation are:

- The change in pension indexation from RPI to CPI and the change in the **discount rate** relative to gilt yields, which have acted to reduce the **future service contribution rate**.

These have been partially offset by;

- The change in financial conditions, as indicated by the changes in gilt yields, and changes to the mortality assumptions, which have acted to increase the **future service contribution rate.**

7. Other Funding Measures

Low risk measure

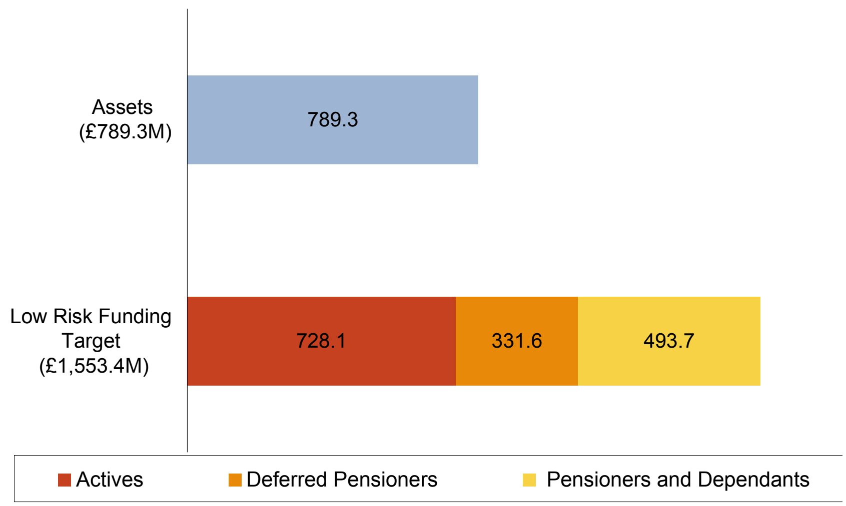
We have also reviewed the low risk position of the Fund, which considers the position if no allowance is made in the **discount rate** for returns on the Fund's assets to exceed gilt yields.

We show this measure for information purposes to give an indication of the level of risk inherent in the funding and investment strategy adopted by the Authority. This is therefore a **planning exercise**.

This measure is generally used for actuarial assessments required under Administration Regulation 38(2), when an Admission Body ceases to participate in the Fund where a move to a notional low risk investment portfolio and funding strategy is appropriate (e.g. if **subsumption** does not apply).

Results

Here is our calculation of the low risk measure in respect of past service.



The **shortfall** of the assets relative to the low risk funding measure is £764.1M. This corresponds to a low risk funding ratio of 51%. Please note that the above funding target does not include the additional liability resulting from the conversion of discretionary compensation pensions (which have previously been paid on a "pay as you go" approach) to funded pensions. Further detail on this is set out in Section 2.

Previous low risk funding ratio

At the previous valuation, the corresponding low risk funding ratio was 63%. The low risk funding ratio has therefore worsened from the previous valuation.

This is largely due to the deterioration in financial conditions since the previous valuation (which resulted in poor returns from investment markets and the change in gilt yields) and the change in the mortality assumptions. The impact of these factors has been partially offset by the move to CPI pension indexation.

Position on discontinuance

It is a requirement of Actuarial Guidance Note GN9 that formal valuation reports consider the funding position should the Fund have been discontinued as at the Valuation Date. However, there are no provisions covering discontinuance in the Regulations.

We believe that it is the view of all actuaries who have to report on Funds governed by the Regulations that this requirement does therefore not apply in the case of such valuations. We therefore do not cover this specific eventuality in this report.

Cover for transfer values

Actuarial Guidance Note GN9 requires us to consider whether there is likely to be sufficient assets, if the statutory funding objective were met, for the Fund to pay unreduced **transfer values**. However the statutory funding objective does not apply to the Fund. Furthermore there is no provision under the Regulations for **transfer values** or other benefits to be restricted by the amount of the Fund assets. We do not therefore believe this measure is relevant for the Fund.

8. Risks and Sensitivity Analysis

Purpose of section

This section comments on some of the key risks faced by the Fund.

Key risks

Here is a recap of some of the key factors that could lead to **shortfalls**:

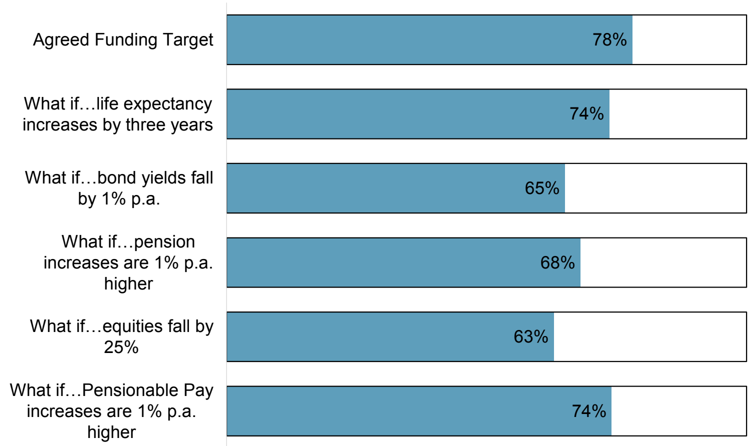
- Investment performance — the return achieved on the Fund's assets may be lower than allowed for in the valuation.
- Investment volatility — the assets may move differently to the **funding target**. The Fund may invest in assets (e.g. equities) that are expected to achieve a greater return than the assets (i.e. gilts and investment grade derivatives) that most closely match the expected benefit payments, in the hope of reducing the contributions required. The more mismatched the investment strategy is, the greater the potential risks.
- Mortality — members could live longer than foreseen, for example, as a result of a medical breakthrough. This would mean that benefits are paid for longer, resulting in a higher cost to the Fund.
- Options for members (or others) — members may exercise options resulting in unanticipated extra costs. For example, members could swap less of their pension for cash at retirement than is assumed.
- Retrospective changes in the benefits payable by the Local Government Pension Scheme (LGPS).

Quantifying the risks

To help the Authority understand the susceptibility of the financial position measured against the **funding target**, we have considered the approximate impact of the following one-off step changes.

- Life expectancy at age 65 is three years greater than anticipated.
- Yields on gilts decrease by 1% per annum (with no change in markets). In practice, if yields fell such that the **discount rate** were reduced, it is possible that there would be some compensating change in asset values, particularly the Fund's bond holdings. This effect is not shown in the chart below.
- Pension increases (including deferred pension increases) are 1% higher than assumed.
- The market values of equities and property fall by 25% (with no change in bond markets).
- Pensionable Pay increases are 1% per annum higher than assumed.

Please see the chart below for the results. The scenarios considered are not 'worst case' scenarios, and could occur in combination (rather than in isolation). The low risk funding measure is also highly sensitive to these factors.



Implications

The above analysis highlights that the Fund is highly susceptible to:

- Equity markets falling, or bond yields falling with no change in investment markets. This risk arises because the Fund is not invested in the assets that most closely match the expected future cashflows (i.e. gilts and investment grade derivatives).
- Members living longer than expected. This risk arises because pension benefits must be paid as long as the beneficiaries are alive.

9. Summary and Conclusions

Headline results

Here are the headlines at the Valuation Date:

- There is a **shortfall** of £222.0M relative to the Fund's **funding target**. This corresponds to a **funding ratio** of 78%.
- The aggregate cost to the Employers of new benefits for members (including lump sums payable on death in service and administration expenses) is 13.6% of Pensionable Pay.
- The low risk funding ratio is 51%.

Developments since the Valuation Date

- As mentioned earlier in this report, in the Emergency Budget in June 2010, the Chancellor announced that Public Sector pensions will be linked to increases in the Consumer Prices Index (CPI). We have allowed for this change in this valuation.
- Since the Valuation Date, equity markets have risen slightly, but gilt and index-linked gilt yields are broadly unchanged. These developments will have had little impact overall on the financial position of the Fund under both the **funding target** and low risk funding measures (calculated with financial assumptions updated in line with market movements).
- In the 2010 Spending Review HM Treasury set out the Government's intention to increase employee contributions into public sector pension schemes. The stated aim was to phase in the increases from April 2012 with the objective of collecting an extra £1.8bn by 2014/15. This would, on average, lead to employee contributions increasing by 3% of Pensionable Pay. It is not yet clear how this will be implemented. Any changes will be reflected in future valuations once they have been incorporated in the Regulations.
- The Independent Public Service Pensions Commission, chaired by Lord Hutton, has been established to review all aspects of pension provision in the Public Sector. The Commission's final report was issued on 10 March 2011 and proposes a number of changes for all public service pensions, including an increase in normal retirement age and a move from final salary to a career average revalued earnings framework. However no specific changes to the Local Government Pension Scheme have as yet been announced or incorporated in the Regulations. We have not therefore made explicit allowance for any changes in this valuation. Any changes will be reflected in future valuations once these have been incorporated in the Regulations.

Addressing the shortfall

Based on the agreed approach set out in section 5, the overall additional **shortfall** contributions payable to the Fund required to eliminate the shortfall within 23 years from 1 April 2011 would be equivalent to about 6.9% of Pensionable Pay assuming membership numbers remain broadly stable and Pensionable Pay increases in line with our assumptions. This would give an aggregate contribution rate of 20.5% of Pensionable Pay.

Contributions paid by individual Employers and their recovery periods will reflect their own circumstances (see below).

Individual Employer rates set by the Actuary

The Employer contribution rates are set by the Actuary taking into account a number of factors including:

- Administration Regulation 36 – which requires the Actuary to have regard to
  - The existing and prospective liabilities
  - The desirability of maintaining as nearly constant a rate as possible and
  - The Authority's **Funding Strategy Statement.**
- The results of the valuation.
- Developments since the Valuation Date.
- Discussions between the Actuary, the Authority and Employers.

Contribution rates for Employers who contribute to the Fund are set out in the **Rates and Adjustments Certificate** in Appendix L.

Rates of contribution payable by individual Employers, or groups of Employers, differ because they take into account their particular membership profiles and funding ratios and, in some cases, the assumptions and recovery periods are specific to their circumstances. The Actuary and the Authority have also agreed that some Admission Bodies can temporarily pay contributions at a level below that required in the long term to meet the **funding target**, subject to the agreement of the London Borough of Southwark to underwrite the resulting underpayment in contributions. This temporary arrangement will be revised at the next valuation due as at 31 March 2013.

More details are given in section 5 and Appendix H.

Aggregate Employer contribution rate

The aggregate Employer contribution applicable from 1 April 2011 is as follows:

Aggregate Employer contribution from 1 April 2011

Year	Contribution rate (% Pensionable Pay)	Annual shortfall contribution (£M)
2011/12	13.3	8.5
2012/13	13.3	10.6
2013/14	13.3	12.8

Notes:

- The annual shortfall contributions above are the aggregate of the shortfall contributions for individual Employers in each year. Details of the contributions payable by individual Employers are set out in Appendix L. **Strain** payments as a result of early retirements are payable in addition.

- The contribution rate expressed as a percentage of Pensionable Pay above is a weighted average of the Employer's contribution rates being paid as a percentage of Pensionable Pay in Appendix L. This is less than the overall **future service contribution rate** for the Fund as some Employers are paying less than their respective **future service contribution rates.**
- At the end of the period shown above, annual shortfall contributions payable by employers are anticipated to increase by approximately 5.3% p.a., and be payable until 1 April 2034. Thereafter contributions are anticipated to be in line with the future service contribution rate. These contributions will be subject to review at future actuarial valuations.
- At the end of each Employer's recovery period, if cessation of participation does not occur, contributions for that Employer are anticipated to be in line with the Employer's future service contribution rate. These contributions will be subject to review at future actuarial valuations
- Member contributions are payable in addition to the Employer rates set out above and in Appendix L, at the rates set out in the Benefits Regulations. **AVC**s are payable in addition.
- Contributions by active members and Employers should be paid to the Fund at such time and at such frequency as required by the Administration Regulations. Any monetary **shortfall** contributions have been calculated on the basis that they are payable uniformly (monthly) over the relevant year.
- The above shortfall contributions include the additional contributions resulting from the conversion of discretionary compensation pensions (which have previously been paid on a "pay as you go" approach) to a funded liability (which has been calculated to be £25.4M). Further detail on this is set out in Section 2.
- The contribution rate above is lower than the calculated future service rate as it has been derived as a weighted average of the component of the contribution rate expressed as a percentage of pay for all Employers in Appendix L.

Monitoring the Fund

In the light of the volatility inherent where investments do not match liabilities, we suggest the Authority monitors the financial position in an appropriate manner on a quarterly basis.

The next formal actuarial valuation under Administration Regulation 36 is due to take place as at 31 March 2013.

Signed on behalf of Aon Hewitt Limited

Chris Archer FIA **Tim Lunn FIA**

Appendix A — Legal and Actuarial Framework

Scope of advice

It is a legal requirement to carry out a full valuation at least once every three years, and this report is produced in compliance with

- Administration Regulation 36.
- The terms of the agreement between us and the Authority on the understanding that it is solely for the use and benefit of the Authority.

Unless prior written consent has been given by Aon Hewitt Limited, this report should not be disclosed to or discussed with anyone else unless they have a statutory right to see it.

We permit the Authority to release copies of this report to the following parties only:

- Any Employer which contributes to the Fund.
- The Department for Communities and Local Government.

We also permit the Department for Communities and Local Government to pass our report to the Government Actuary's Department in connection with their statutory duties. None of the above bodies have our permission to pass our report on to any other parties.

Notwithstanding such consent, neither we nor Aon Hewitt Limited accepts or assumes any responsibility to anyone other than the addressees of this report.

Professional Guidance Note GN9

We confirm that this report has been prepared in accordance with version 9.0 of Guidance Note 'GN9: Funding Defined Benefits - Presentation of Actuarial Advice' published by the Board for Actuarial Standards. However the following aspects of GN9 are not relevant to the LGPS and its funds in the current circumstances and we have not reported on them:

- Paragraph 3.4.16 of GN9 requires the actuary to include the certification of technical provision in relation to a valuation under Part 3 of the Pensions Act 2004. As Part 3 of the Pensions Act 2004 does not apply to the LGPS, this report does not comply with paragraph 3.4.16 of GN9; and
- Part 3.5 of GN9 requires the actuary to report on the value of the liabilities that would arise had the Fund wound up on the valuation date (based on the cost of buying out the accrued benefits with insurance policies). As the LGPS is a statutory scheme, there is no regulatory provision for scheme wind up and the scheme members have a statutory right to their accrued benefits. Therefore the concept of solvency on a buy-out basis does not apply to the Fund. Accordingly, this report does not comply with part 3.5 of GN9.

For the purposes of compliance with Section 4 of GN9 we have treated the Rates and Adjustments Certificate and shortfall contributions as analogous to the schedule of contributions and recovery plan referred to in section 4.

Appendix B — Assets

Assets

The audited Fund accounts for the year ended 31 March 2010 show its assets as £786.8M, invested as follows:

Asset type	Market value (£M)	% of Total
Equities	482.4	61.1
Property	119.8	15.2
Fixed interest securities	106.8	13.6
Index linked securities	61.6	7.8
Cash and net current assets	16.2	2.1
Total	**786.8**	**100.0**

The above excludes assets for defined contribution AVC accounts.

For the purposes of our valuation we have adjusted the assets by £2.5M in respect of **strain** payments due to be paid after the Valuation Date in respect of early retirements on redundancy, retirement or ill-health before the age of 60 that occurred before the Valuation date. This data was provided to us by the Authority.

We have therefore taken the market value of assets for the purposes of our valuation to be £789.3M (excluding AVC accounts) at the Valuation Date.

Appendix C — Benefits

Introduction

The benefits of the Local Government Pension Scheme (LGPS) are set out in Regulations, the principal Regulations currently being the Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 as subsequently amended. A broad summary of the benefits currently payable by the LGPS to full-time contributory members as at the date of signing this report is given below.

Readers should refer to the Regulations for further details.

	Benefits provided as at Valuation Date
Normal retirement age	65
Member contributions	Rate between 5.5% of pay and 7.5% of pay dependent on contribution band in which member is situated. Special provisions apply for certain categories of former manual workers.
Final pay	Generally Pensionable Pay over the 12 months prior to retirement or earlier exit or, if higher, in one of the preceding two years, or the best three year average level of Pay over the ten years prior to retirement or earlier exit.
Normal retirement pension	1/60 of Final Pay for each year of Pensionable Service on or after 1 April 2008. For each year of Pensionable Service before 1 April 2008: ▪ a pension of 1/80 of Final Pay, plus ▪ a lump sum of 3/80 of Final Pay
Lump sum	Pension can be surrendered for lump sum to a maximum lump sum of one quarter of the total value of benefits. Conversion rate is £12 for each £1 p.a. of pension given up.
Early retirement pension	Reduced pension payable on retirement after age 60, or after age 55 with Employer consent. Pension calculated as for normal retirement but based on Pensionable Service to early retirement date. Certain categories of member eligible for protection can retire on unreduced pension if their age plus Pensionable Service is greater than or equal to 85 years.
Incapacity and ill-health pensions	**Tier 1** ▪ Payable to members with more than 3 months' Pensionable Service based on Final Pay at exit and potential Pensionable Service that would have been completed to age 65. ▪ To qualify for this benefit there must be no reasonable prospect of the member being capable of undertaking any gainful employment before Normal Retirement Age.

	Tier 2 ▪ Payable to members with more than 3 months' Pensionable Service based on Final Pay at exit and service completed to date of exit plus 25% of the period from date of exit to Normal Retirement Age. ▪ To qualify for this benefit the member must be expected to be capable of undertaking gainful employment at some point after three years but before Normal Retirement Age. **Tier 3** ▪ Payable to members with more than 3 months' Pensionable Service based on Final Pay at exit and Pensionable Service completed to date of exit ▪ To qualify for this benefit the member must be expected to be capable of undertaking gainful employment at some point in the next 3 years ▪ Payable for 3 years, or until gainful employment obtained, if earlier In each case members must be permanently incapable of efficiently discharging their current duties to qualify.
Leaving Pensionable Service	Pension payable on retirement at age 65 based on Final Pay at exit and Pensionable Service to date of exit. Certain categories of member can retire early on unreduced pension if aged 60 or over and their age plus service is greater than or equal to 85 years. Service in this case includes the period between date of exit and Normal Retirement Age.
Pension increases	▪ Pensions in payment in excess of Guaranteed Minimum Pensions (**GMPs**) are increased each year in line with price inflation. With effect from the increase in April 2011 this will be measured by the annual increase in the Consumer Prices Index (previous increases had reflected the Retail Prices Index). ▪ Deferred pensions are similarly increased in deferment. ▪ **GMPs** increase in deferment in line with State revaluation factors. ▪ **GMPs** accrued after 6 April 1988 increase in payment each year at the lower of 3% and price inflation, as measured above.
Death benefits in service	▪ A lump sum of 3 x Final Pay at exit. A cohabitee's pension of 1/160 of Final Pay at exit for each year of service, including a service enhancement that would have applied had retirement due to ill-health under Tier 1 occurred at the date of death.
State pension scheme	The Scheme is contracted out of the State Second Pension Scheme.

Appendix D — Membership Data

Active members at 31 March 2010 *(31 March 2007)*

		Number	Average age	Total Pensionable Pay (£000 p.a.)	Average Pensionable Pay (£ p.a.)	Average service (years)
Men	**2010**	**2,270**	**45.6**	**68,939**	**30,370**	**11.2**
	2007	*2,381*	*44.4*	*66,868*	*28,084*	*10.7*
Women	**2010**	**4,000**	**45.1**	**90,931**	**22,733**	**7.5**
	2007	*4,009*	*43.9*	*83,256*	*20,767*	*7.1*
Total	**2010**	**6,270**	**45.3**	**159,870**	**25,498**	**8.8**
	2007	*6,390*	*44.1*	*150,124*	*23,493*	*8.4*

Note: Pay is that over the year to the Valuation Date. Annualised pay is included for entrants in the last year. Part time pay is included for part-timers.

Deferred pensioners at 31 March 2010 *(31 March 2007)*

		Number	Average age	Total pension (£000 p.a.)	Average pension (£ p.a.)
Men	**2010**	**2,702**	**47.1**	**6,928**	**2,564**
	2007	*2,497*	*46.9*	*6,164*	*2,469*
Women	**2010**	**4,009**	**45.4**	**7,299**	**1,821**
	2007	*3,281*	*45.0*	*5,841*	*1,780*
Total	**2010**	**6,711**	**46.1**	**14,227**	**2,120**
	2007	*5,778*	*45.8*	*12,005*	*2,078*

Note: The deferred pensions have been increased to the Valuation Date and include increases granted in April 2010 (2007: April 2007).

In addition to the numbers above there were a number of members who had yet to decide whether to take a transfer payment. Suitable allowance has been made for these in our calculations.

The total and average pensions in 2007 have changed from the figures set out in the 2007 valuation report as that report quoted post-commutation pension.

Pensioners at 31 March 2010 ***(31 March 2007)***

		Number	Average age	Total pensions (£000 p.a.)	Average pension (£ p.a.)
Men	**2010**	**2,465**	**70.6**	**16,068**	**6,518**
	2007	*2,370*	*70.2*	*14,103*	*5,951*
Women	**2010**	**2,681**	**70.0**	**10,581**	**3,947**
	2007	*2,371*	*69.2*	*8,477*	*3,575*
Dependants	**2010**	**1,091**	**75.9**	**2,459**	**2,254**
	2007	*1,030*	*74.9*	*2,476*	*2,404*
Total	**2010**	**6,237**	**71.3**	**29,108**	**4,667**
	2007	*5,771*	*70.6*	*25,056*	*4,342*

Note: *The pensions have been increased to the Valuation Date and include increases granted in April 2010 (2007: April 2007).*

In 2010 there are also 91 children (2007: 99) who are in receipt of pensions. Suitable allowance has been made for these in our calculations.

These figures do not include those pensioners in receipt of Discretionary Benefits as referred to in Section 2.

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Appendix E — Membership Data by Employer

Employer name	Number of active members	Total pensionable pay of active members (£000s)	Number of deferred pensioners	Number of pensioner and dependant members
London Borough of Southwark*	5,697	146,311	6,463	6,266
Chequers	1	(see note below)	-	-
Borough Market	1	(see note below)	3	8
Southwark Law Project	6	199	5	4
Fusion (original contract)	-	-	116	6
Fusion (new contract)	46	1,059	-	-
CLPE	5	123	3	3
South London Gallery	1	(see note below)	1	-
Odyssey	35	1,081	4	7
APCOA	9	45	-	3
Charter Security	2	(see note below)	-	1
Olympic	4	94	-	2
Morrisons 1	10	369	1	3
Together	1	(see note below)	2	3
Camden Day Centre	42	1,014	1	5
Walworth Academy	46	899	6	2
PFI Veolia	117	3,302	18	-
Leather Market	4	175	-	1
Morrisons 2	2	(see note below)	-	-
Harris Academy Bermondsey	27	627	8	4
Harris Girls Academy East Dulwich	19	316	3	4
Peckham Academy	77	1,355	60	3
St Michael and All Angels Academy	21	498	13	1
Bacon's College	50	1,182	2	1
Globe Academy	41	869	2	1
Harris Boys Academy East Dulwich	5	109	-	-
RSM Tenon	1	(see note below)	-	-

Note: *Pay is that over the year to 31 March 2010. Annualised pay is included for entrants in the last year. Part time pay is included for part-timers.*

For Employers with three or fewer members, pensionable pay is not shown for data privacy reasons.

** Employers for whom no contributions are certifiable have been grouped with the London Borough of Southwark for the purposes of this membership summary.*

Appendix F — Assumptions for Funding Target

The assumptions used for assessing the **funding target** are summarised below. Different assumptions are used for the low risk funding measure, as explained in Appendix G.

Financial Assumptions

Yields on long dated gilts:	**% p.a.**
▪ Fixed interest	4.5
▪ Index linked	0.7
In service discount rate	
▪ Scheduled Bodies	7.0
▪ Admission Bodies	6.25
Left service discount rate	
▪ Scheduled Bodies	7.0
▪ Admission Bodies	4.75
Rate of pay increases (in addition to promotional increases)	5.3
Rate of price inflation	
▪ Retail Prices Index	3.8
▪ Consumer Prices Index	3.3
Rate of pension increases	
▪ On benefits in excess of GMPs	3.3
▪ On post-5 April 1988 GMPs	2.7
Rate of deferred pensions increases	
▪ Total deferred pension increases	3.3
▪ GMP increases in deferment (franked against deferred pension increases)	2.7

Demographic Assumptions

Post-retirement mortality

Normal health base rates

Year of Birth base rates

Standard SAPS Normal Health tables.

Scaling factors

Rates adjusted by scaling factors derived having regard to the Fund's experience:

Men	115%
Women	85%

Ill-health base rates

Year of Birth base rates

Standard SAPS Ill-Health base tables.

Scaling factors

Rates adjusted by scaling factors derived having regard to the Fund's experience:

Men	100%
Women	100%

Improvements to base rates

An allowance for improvements in line with the CMI 2009 improvements (for men or women as appropriate), with a long term rate of improvement of 1.25% p.a.

What does this mean?

A 65 year old male pensioner in normal health is now assumed on average to live to 86.0 years. And a 65 year old female pensioner in normal health is assumed on average to live to 90.7 years.

Pre-retirement mortality

Base rates

Standard SAPS Normal Health year of birth tables adjusted by a scaling factor of 75% (derived having regard to the Fund's experience).

Improvements to base rates

An allowance for improvements in line with the CMI 2009 improvements (for men or women as appropriate), with a long term rate of improvement of 1.25% p.a.

Early retirements

All members are assumed to retire at the earliest age at which they can retire as of right, with no reduction to benefits accrued prior to 1 April 2008.

Members joining on or after 1 October 2006 are assumed to retire at age 65.

Withdrawals

Allowance made for withdrawals from service (see sample rates below).

On withdrawal, members are assumed to leave a deferred pension in the Fund, and are not assumed to exercise their option to take a **transfer value**.

Retirement due to ill-health

Employers meet the cost of ill-health retirements by capital contributions. We therefore make no allowance for ill-health retirements in our calculations.

Family details

A man is assumed to be three years older than his spouse, civil partner or cohabitee. A woman is assumed to be three years younger than her spouse, civil partner or cohabitee.

90% of actives are assumed to be married or co-habiting (with a person eligible for death benefits) at retirement or earlier death.

90% of non-actives are assumed to be / have been married or co-habiting (with a person eligible for death benefits) at the date of the valuation or age 65 if earlier.

Commutation Each member assumed to exchange 30% of the maximum amount permitted of their past service pension rights on retirement for additional lump sum.

Each member assumed to exchange 70% of the maximum amount permitted of their future service pension rights on retirement for additional lump sum.

Promotional salary increases Allowance made for age-related promotional increases (see sample rates below).

Expenses 0.6% of Pensionable Pay added to the value of future benefit accrual.

Sample rates The table below illustrates the allowances made for withdrawals from service at various ages. Also shown is the allowance included for promotional pay increases, which is shown as the percentage increase over the next year.

Current age	Percentage leaving the Fund in the next year as a result of withdrawal from service		Percentage promotional pay increase over year	
	Men	Women	Men	Women
20	28.2	28.2	9.1	5.7
25	17.8	17.8	4.8	2.8
30	11.2	11.2	2.6	2.2
35	9.4	9.4	2.0	2.4
40	7.4	7.4	1.8	2.0
45	4.2	4.2	1.7	1.9
50	2.7	2.7	-	-
55	1.3	1.3	-	-
60	-	-	-	-

Appendix G — Assumptions for Low Risk Funding Measure

Derivation of assumptions

We have set the **discount rate** for the low risk measure equal to the yield on fixed-interest gilts of appropriate term at the Valuation Date.

All other assumptions are as used for the **funding target** as set out in Appendix F.

Summary of assumptions

Here is a summary of the main assumptions underlying our low risk funding measure, where these are different to the **funding target** basis:

Assumption	What is used for low risk measure % p.a.
In service discount rate	
▪ Scheduled Bodies	4.5
▪ Admission Bodies	4.5
Left service discount rate	
▪ Scheduled Bodies	4.5
▪ Admission Bodies	4.5

Appendix H — Details of Employers' Funding Strategies

Recovery periods

We show below the recovery periods used for Employers in the Fund.

Employer	Recovery period (years) from 1 April 2011
London Borough of Southwark	23
Chequers	Future Working Lifetime
Southwark Law Project	23
Fusion (2nd admission)	5
RSM Tenon	3 8/12
CLPE	10
South London Gallery	Future Working Lifetime
Odyssey	15
APCOA	1 3/12
Charter Security	23
Olympic	2 5/12
Morrisons 1	15
Together	0
Camden Day Centre	23
PFI Veolia	23
Leathermarket	23
Morrisons 2	23
Harris Academy Bermondsey	23
Harris Girls Academy East Dulwich	23
Peckham Academy	23
St Michael and All Angels Academy	23
Walworth Academy	23
Bacon's College	23
Globe Academy	23
Harris Boys Academy East Dulwich	23

Stepping

We show below the stepping periods used to phase in contribution increases for Employers in the Fund.

Employer	Stepping period (years) from 1 April 2011
London Borough of Southwark	3

Underwriting

We show below details of which Admission Bodies are paying reduced contributions, as a result of being temporarily underwritten by the London Borough of Southwark.

Admission Body
Chequers
Southwark Law Project
Centre for Literacy in Primary Education (CLPE)
South London Gallery
Odyssey
Olympic
Morrisons 1
Together
Camden Day Centre
PFI Veolia
APCOA
Morrisons 2

Appendix I — Consolidated Revenue Account

		Total £000
Fund at 31 March 2007		
Income		
Contributions	Employer normal	76,026
	Employer Additional	14,738
	Employer Special	560
	Employee	31,415
Transfers-in		16,329
Investment income		45,214
Other income		638
Total income		***184,920***
Outgo		
Pensions paid		82,989
Lump sums and death benefits paid		21,157
Transfers-out		15,533
Refunds of contributions on leaving		14
Expenses of investment		11,357
Expenses of administration		2,801
Other outgo		7
Total outgo		***133,858***
Change in market value		**(18,670)**
Fund at 31 March 2010		**786,766**

Notes

This excludes members' AVCs and adjustments in respect of ***strain*** *payments which are due to be paid after the Valuation Date in respect of retirements that occurred before that date (see Appendix B).*

This includes the change from mid-value to bid-value over the period.

Appendix J — Membership Experience

The table below compares the actual numbers of movements from the Fund over the period 2007 to 2010 with the numbers expected on the basis of the assumptions adopted for the current valuation.

	Males	Females
Death in service:		
Actual	8	8
Expected	10	15
Withdrawals excluding refunds:		
Actual	570	1000
Expected	330	568
Normal and voluntary retirements:		
Actual	83	153
Expected	161	187
Ill-health retirements:		
Actual	22	26
Expected	-	-
Severance and redundancy retirements:		
Actual	76	74
Expected	-	-

Appendix K — Current Contribution Rates

We show below the contributions payable by each Employer in the year ending 31 March 2011.

Employer	% Pensionable Pay	Additional monetary amount
Scheduled Bodies		
London Borough of Southwark	17.8	-
Walworth Academy	15.4	-
Harris Academy Bermondsey	14.5	-
Harris Girls Academy East Dulwich	14.5	-
Peckham Academy	11.9	-
St Michael and All Angels Academy	14.5	-
Bacon's College	15.5	-
Globe Academy	17.3	-
Harris Boys Academy East Dulwich	11.7	-
Admission Bodies		
Chequers	15.5	-
Borough Market	25.7	£13,056 p.a.
Southwark Law Project	22.0	-
Fusion (New admission)	22.5	£127,636.32 p.a.
CLPE	24.1	-
South London Gallery	17.2	-
Odyssey	10.2	-
APCOA	18.8	-
Charter Security	21.0	£7,920 p.a.
Olympic	6.9	-
Morrisons 1	17.1	-
Together	21.1	£3,000 p.a.
Camden Day Centre	17.7	-
PF1 Veolia	20.9	-
Leathermarket	19.3	-
Morrisons 2	22.0	-
RSM Tenon	28.8	-

Appendix L — Rates and Adjustments Certificate

In accordance with Regulation 36 of the Local Government Pension Scheme (Administration) Regulations 2008 (the 'Administration Regulations'), we certify that contributions should be paid by Employers at the following rates for the period 1 April 2011 to 31 March 2014.

- A common rate of 13.6% of Pensionable Pay.
- Individual adjustments which, when added to or subtracted from the common rate, produce the following Employer contribution rates

Employer	Contribution rate 1 April 2011 to 31 March 2014 % pay	Additional Monetary Amount Year commencing 1 April 2011	2012	2013
London Borough of Southwark	13.1	8,400,000	10,500,000	12,700,000
Chequers	15.5	-	-	-
Southwark Law Project	22.0	-	-	-
Fusion (New admission)	11.3	127,636.32	127,636.32	127,636.32
RSM Tenon	0	-	-	-
CLPE	24.1	-	-	-
South London Gallery	17.2	-	-	-
Odyssey	10.2	-	-	-
APCOA	18.8	-	-	-
Charter Security	21.0	7,920	7,920	7,920
Olympic	23.8	-	-	-
Morrisons 1	17.1	-	-	-
Together	21.3	-	-	-
Camden Day Centre	17.7	-	-	-
PFI Veolia	20.9	-	-	-
Leathermarket	19.3	-	-	-
Morrisons 2	22.0	-	-	-
Harris Academy Bermondsey	13.8	-	-	-
Harris Girls Academy East Dulwich	15.8	3,200	3,300	3,500
Peckham Academy	11.3	-	-	-
St Michael and All Angels Academy	12.6	-	-	-
Walworth Academy	13.3	-	-	-
Bacon's College	13.8	-	-	-
Globe Academy	13.6	-	-	-
Harris Boys Academy East Dulwich	10.2	-	-	-

These represent the minimum contributions to be paid by each Employer. Employers may choose to pay additional contributions from time to time subject to the Administering Authority's agreement.

In addition, any extra liabilities falling on the Fund in respect of retirements under Regulations 18, 19 or 30 of the Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2008 (the 'Benefits Regulations') should be financed by additional Employer contributions, calculated in a manner advised by the Actuary, and payable over a period of three years.

In addition, any extra liabilities falling on the Fund in respect of retirements under Benefits Regulations 20 should be financed by additional Employer contributions, calculated in a manner advised by the Actuary, and payable over a period of five years.

In addition, any additional benefits granted under Benefits Regulations 12 or 13 should be financed by additional Employer contributions, under Administration Regulation 40, or as calculated in a manner advised by the Actuary.

Additional contributions may be payable by any Admission Bodies which have ceased to participate in the Fund since 31 March 2010 and will be certified separately.

Contribution rates for Employers commencing participation in the Fund after 31 March 2010 will be advised separately.

Where payments due from an Employer listed in this Certificate are expressed as capital amounts, the amounts payable by that Employer should be adjusted to take account of any amounts payable, in respect of a surplus or shortfall to which those capital payments relate, by new employers created after the valuation date which have been credited with proportions of the assets and liabilities of the relevant Employer. Any adjustment should be as advised by the Fund Actuary.

This certificate should be read in conjunction with the notes overleaf.

For Aon Hewitt Limited
40 Queen Square
Bristol
BS1 4QP

Chris Archer FIA | **Tim Lunn FIA**

30 March 2011 | **30 March 2011**

Notes to Actuary's Certificate

The contribution rates certified overleaf have been assessed using the actuarial methods and assumptions detailed in our report dated 30 March 2011.

These assumptions imply the following levels of new retirement liabilities from active membership status:

Type of Retirement	Anticipated retirements over 4 year period from 1 April 2010 to 31 March 2014	
	Number	**New Pension £'000**
Normal and voluntary under Regulations 16 or 30 of the Benefits Regulations	571	5,965
Comments on Funding	Such retirements are generally 'cost neutral'. Additional funding would not normally be required if actual retirements exceed the number anticipated, unless retirements occur before age 60 and no reduction for early payment apples. The Authority requires separate funding of liabilities arising from such retirements and, as such, the financial impact of these retirements is neutral	
Ill-health under Regulation 20 of the Benefits Regulations	Nil	Nil
Comments on Funding	Such retirements increase costs due to the early payment of enhanced benefits. If actual retirements exceed the number anticipated, and no action is taken before the next valuation, this would be identified as a source of loss at the next valuation. The Authority requires separate funding of liabilities arising from such retirements and, as such, the financial impact of these retirements is neutral.	
Severance and redundancy under Regulation 19 of the Benefits Regulations	Nil	Nil
Comments on Funding	Such retirements increase costs due to the early payment of benefits. Any enhancement of benefits through the Fund would increase costs further. If actual retirements exceed the number anticipated, and no action is taken before the next valuation, this would be identified as a source of loss at the next valuation. The Authority requires separate funding of liabilities arising from such retirements and, as such, the financial impact of these retirements is neutral.	

Flexible retirement under Regulation 18 of the Benefits Regulations	Nil	Nil
Comments on Funding	Such retirements may increase costs due to the early payment of benefits. If actual retirements exceed the number anticipated, and no action is taken before the next valuation, this would be identified as a source of loss at the next valuation. The Authority requires separate funding of liabilities arising from such retirements and, as such, the financial impact of these retirements is neutral.	

Glossary

Additional Voluntary Contributions (AVCs)	Voluntary contributions paid by members under Administration Regulation 25 to secure defined contribution (DC) benefits. AVCs and any associated Shared Cost AVCs paid by the employer are excluded from the valuation.
Attained Age Method	One of the common methods used by actuaries to calculate a contribution rate to the scheme. This method calculates the **present value** of the benefits expected to accrue to members over their expected remaining membership of the scheme expressed as a percentage of their expected future pensionable pay. It allows for projected future increases to pay through to retirement or date of leaving service. The method is based on the current membership and takes no account of the possibility of further members joining the scheme. If there are no new members, this method would be expected to result in a stable contribution rate, once surpluses or shortfalls are taken into account, and if all the other assumptions are borne out. However, if more members join the scheme to replace older leavers, the contribution rate can be expected to fall.
Best estimate	This is an estimate of a figure such that the eventual outcome is considered to be equally likely to be higher or lower than the **best estimate**.
Discount rate	This is used to place a **present value** on a future payment. A 'low risk' **discount rate** is usually derived from the investment return achievable by investing in government gilt-edged stock. A **discount rate** higher than the 'low risk' rate is often used to allow for some of the extra investment return that is expected by investing in assets other than gilts.
Funding objective	To hold sufficient and appropriate assets to meet the **funding target.**
Funding principle	To hold sufficient and appropriate assets to meet the benefits as they fall due.
Funding ratio	This is the ratio of the value of assets to the **funding target**.
Funding Strategy Statement	A document produced by the Authority in accordance with Regulation 76A of the Local Government Pension Scheme Regulations 1997, which sets out the funding strategy adopted for the Fund. The statement is produced and maintained in consultation with the Employers and the Actuary. The Actuary must have regard to this statement in preparing the valuation under Administration Regulation 36.

Funding target	An assessment of the **present value** of the benefits that will be paid from the scheme in the future, normally based on pensionable service prior to the Valuation Date, and agreed by the Actuary and the Authority to be appropriate to meet the promised benefits.
Future service contribution rate	The contribution rate (expressed as a percentage of pensionable pay) required to meet the cost of benefits which will accrue to members in future.
GMPs	Most schemes that were contracted out of the State Earnings Related Pension Scheme (SERPS) before April 1997 have to provide a pension for service before that date at least equal to the Guaranteed Minimum Pension (**GMP**). This is approximately equal to the SERPS pension that the member would have earned had the scheme not been contracted out. **GMPs** ceased to build up on 6 April 1997 when the legislation changed.
Planning exercise	A planning exercise involves the estimate of an amount for budgeting or target-setting purposes.
Present value	Actuarial valuations involve projections of pay, pensions and other benefits into the future. To express the value of the projected benefits in terms of a cash amount at the Valuation Date, the projected amounts are discounted back to the Valuation Date by a **discount rate**. This value is known as the **present value**. For example, if the **discount rate** was 6% a year and if we had to pay a lump sum of £1,060 in one year's time the **present value** would be £1,000.
Projected Unit Method (PUM)	One of the common methods used by actuaries to calculate a contribution rate to the scheme. This method calculates the **present value** of the benefits expected to accrue to members over a control period (often one year) following the Valuation Date. The **present value** is usually expressed as a percentage of the members' pensionable pay. It allows for projected future increases to pay through to retirement or date of leaving service. Provided that the distribution of members remains stable with new members joining to take the place of older leavers, the contribution rate calculated can be expected to remain stable, if all the other assumptions are borne out. If there are no new members however, the average age will increase and the contribution rate can be expected to rise.
Prudent	Prudent assumptions are assumptions that, if the Fund continues on an ongoing basis, are more likely to overstate than understate the amount of money actually required to meet the cost of the benefits.
Rates and Adjustments Certificate	A certificate required by the Administration Regulations setting out what contributions are payable by each Employer over the three years from 1 April 2011.

Recovery period	The period over which any **surplus or shortfall** is to be eliminated.
Recovery plan	Where a valuation shows a funding **surplus or shortfall** against the **funding target,** the **recovery plan** sets out how the **funding objective** will be met.
Strains	This represents the increase in the **present value** of a member's benefits as a result of additional benefits granted in certain circumstances. This includes the provision of enhanced benefits on retirement (for example as a result of waiving an actuarial reduction for early payment) or any discretionary benefits granted.
Subsumption	When an Employer ceases participation in the Fund, such that it will no longer have any contributing members, it is possible that another Employer in the Fund will agree to provide a source of future funding in respect of any emerging deficiencies in respect of the liabilities of the ceding Employer. In this document this is referred to as '**subsumption**'. In such circumstances the ceding Employer's liabilities are known as 'subsumed liabilities' (in that responsibility for them is subsumed by the accepting Employer).
Surplus or shortfall	This is the difference between assets and the **funding target**. If the **funding target** is greater than the value of assets, then the difference is called the **shortfall**. If the value of assets is greater than the **funding target,** then the difference is called the **surplus**.
Transfer value	Members generally have a legal right to transfer their benefits to another pension arrangement before they retire. In taking a transfer, members give up their benefits in the scheme, and a sum of money (called the **transfer value**) is paid into another approved pension scheme; this is used to provide pension benefits on the terms offered in that scheme.