Hewitt

Hewitt Bacon & Woodrow Limited
Registered in England No. 4396810
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Tyne and Wear Pension Fund

Actuarial Valuation at 31 March 2007

27 March 2008

Prepared for

The Council of the Borough of South Tyneside as Administering Authority

Prepared by

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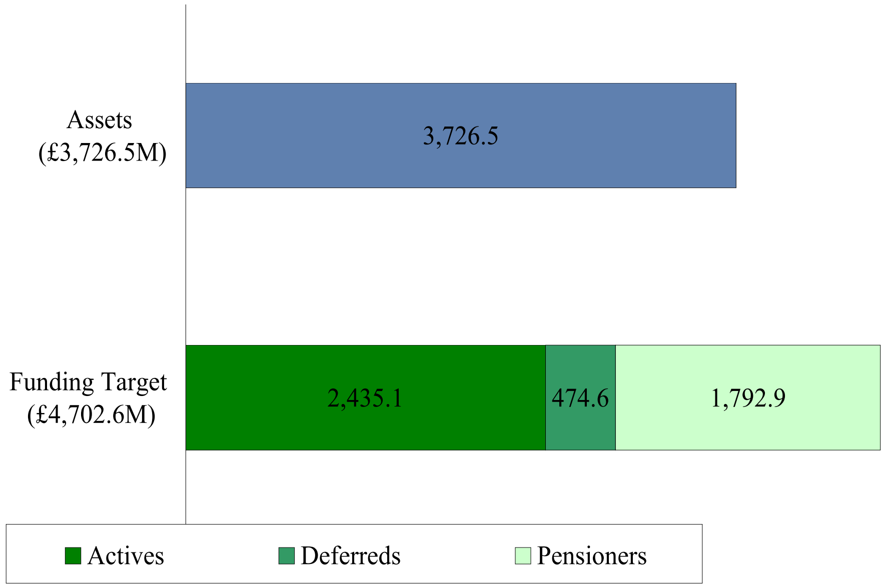
Executive Summary

Valuation results

The financial position of the Fund was assessed against the agreed **funding target** as at 31 March 2007.

There is a **shortfall** of £976.1M relative to the agreed **funding target** (i.e. the level of assets agreed by the Authority and the Actuary as being consistent with the **Funding Strategy Statement** and appropriate to meet member benefits, assuming the Fund continues as a going concern).



Contribution Rates

The aggregate Employer contribution rate for future service (i.e. benefit accrual after the valuation date) is calculated to be 15.1% of Pensionable Pay.

In order to restore the **funding ratio** to 100% using a recovery period of 22 years from 1 April 2008, the aggregate Employer contribution rate is calculated to be 21.1% of Pensionable Pay. The headline figure at the 2004 valuation, using a recovery period of 25 years from the valuation date, was 20.1% of Pensionable Pay.

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. This is explained further in the remainder of this document.

Contents

1. Introduction

Formal valuation

We have carried out an actuarial valuation of the Tyne and Wear Pension Fund at 31 March 2007.

The main purposes of the actuarial valuation are to review the financial position of the Fund and to recommend the rates of contributions payable to the Fund in the future.

Defined contribution AVC 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 levels of **shortfall** or **surplus**, but it would increase the percentage **funding ratios** from those shown in the main body of this report.

Similarly we have excluded AVCs from the contribution rates quoted throughout this report.

A snapshot view

The report concentrates on the Fund's financial position at the Valuation Date and, in particular, the contribution rates take no account of changes in financial markets between the effective date of the valuation and the date of signing the report. Some comments on developments between the effective date of the valuation and the date of signing the report are, however, set out in section 9.

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

The report includes some technical pension terms. The words shown in **bold print** are explained further in the glossary.

For brevity, we have also used the following shorthand:

Shorthand	What it means
Authority	Administering Authority
Pensionable Pay	"Pensionable Pay" as defined in the Benefit Regulations or "Pay" defined in the 1997 Regulations
Pensionable Service	"Membership" as defined in the Benefit Regulations or "Total Membership" as defined in the 1997 Regulations
Benefit Regulations	The Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 (as subsequently amended).

Administration Regulations	The Local Government Pension Scheme (Administration) Regulations 2008
Regulations	The 1997 Regulations, Benefit Regulations or Administration Regulations as appropriate
Fund	Tyne and Wear Pension Fund
Valuation Date	31 March 2007
Employers	All employers participating in the Fund
1997 Regulations	The Local Government Pension Scheme Regulations 1997 as subsequently amended.

The small print

The report is prepared solely for our client, the Council of the Borough of South Tyneside (South Tyneside Council), in its capacity as Administering Authority for the Fund. However, we permit the Authority to release copies of this report to certain parties listed in Appendix A.

This report has been prepared in accordance with version 8.1 of actuarial guidance note 'GN9 (version 8.1): Funding Defined Benefits - Presentation of Actuarial Advice' published by the Board for Actuarial Standards, subject to certain areas where GN9 is not relevant to this Fund. A more detailed analysis of compliance with GN9 is set out in Appendix A.

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 was carried out by T N Lunn FIA and C J Archer FIA of Hewitt Bacon & Woodrow Limited as at 31 March 2004. It revealed that:

- There was a **shortfall** of £1,344.5M using the ongoing assumptions adopted for that valuation. This corresponded to a past service **funding ratio** of 64%.
- The aggregate Employer future service contribution rate was 14.0% of Pensionable Pay.

After allowing for short term assumed additional investment returns, and additional contributions to restore the **funding ratio** to 100% over a period of 25 years from the valuation date, the aggregate Employer contribution rate was calculated to be 20.1% of Pensionable Pay.

Following discussion of these results, the Authority agreed that most Employers could phase in the new contribution rates by use of three broadly equal annual steps. South Tyneside Council paid the following contributions:

239% of members' contributions, plus

Year commencing 1 April 2005	£4,457,000
Year commencing 1 April 2006	£5,108,000
Year commencing 1 April 2007	£5,758,000

At the 2004 valuation, the average member contribution rate for South Tyneside Council was 5.8% of Pensionable Pay. Readers should note that this rate may have varied slightly over the inter-valuation period.

Employers have paid additional contributions to cover the costs of early retirements.

Our formal report on the valuation at 31 March 2004 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 on what benefits are 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.
- Changes to future expectations of benefit payments or investment returns.

These items are discussed later in this report (sections 5 and 6). As well as these high level points, please note the following developments:

Benefit changes
A significant number of changes have been made to the benefits of the Local Government Pension Scheme since the previous valuation. A detailed listing of the main changes is given in Appendix C, but the changes can be broadly categorised into three areas:

- The Rule of 85 retirement provisions were reinstated, and subsequently removed again. Transitional protections for some categories of member were extended to widen their coverage.
- Changes were made consistent with the Finance Act 2004 (see below).
- A new scheme has been put in place which comes into effect as at 1 April 2008. All existing members will transfer to the new scheme as at that date.

Finance Act 2004
On 6 April 2006, the government radically overhauled the pensions tax regime, and changes have been made to the Regulations to reflect this.

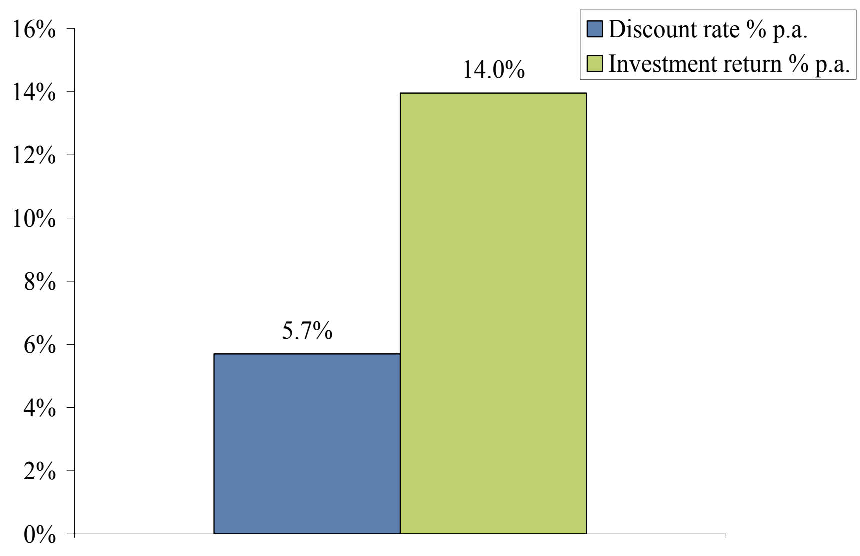
The valuation allows for the Finance Act changes only where the effect is likely to be material. The key new element for most members was an option to surrender pension for lump sum, within limits, at a conversion rate of £12 for each £1 pa of pension given up.

Financial development

A variety of factors affect the financial position of the Fund, including investment returns, changes in the 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 average discount rate used to calculate the Fund’s **funding target** at the previous valuation;
- 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.

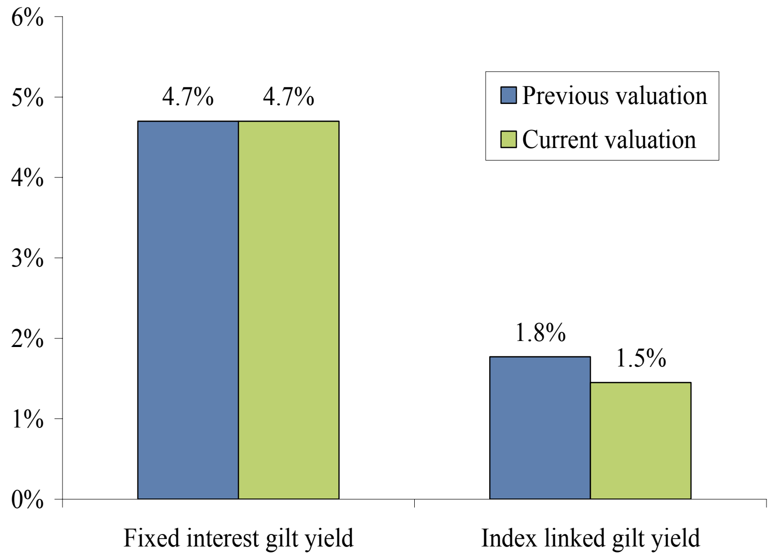
Key Experience items – investment returns



The investment return has been significantly higher than the **discount rate** assumed due to outperformance of the investment markets.

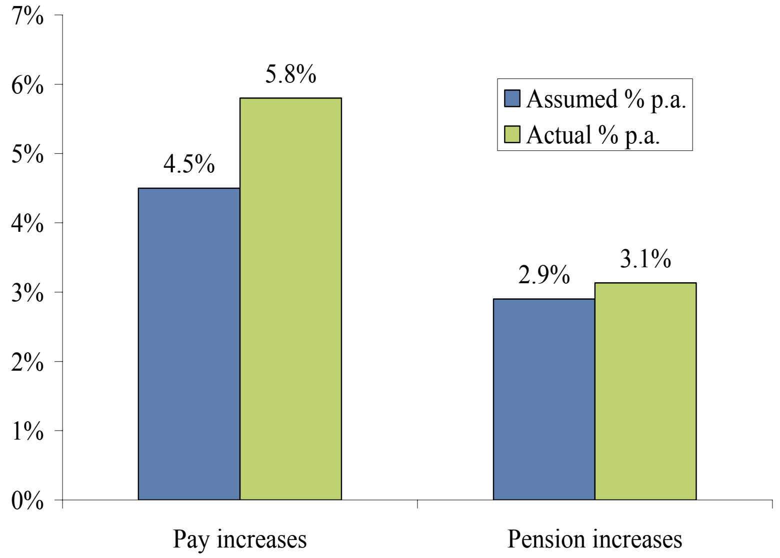
(Note that the chart does not include any assumed short term investment returns.)

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 inflation.

Key experience items – pay and pension increases



Increases to pensions in payment were slightly higher than assumed. Pay increases have also exceeded assumed levels. Note that the pay analysis above includes the impact of promotional pay increases.

Impact on results

Overall these factors have had a significant positive impact on the financial position of the Fund. Where material, the estimated financial impact of the developments described in this section is shown in section 6.

3. Information Used

Key information

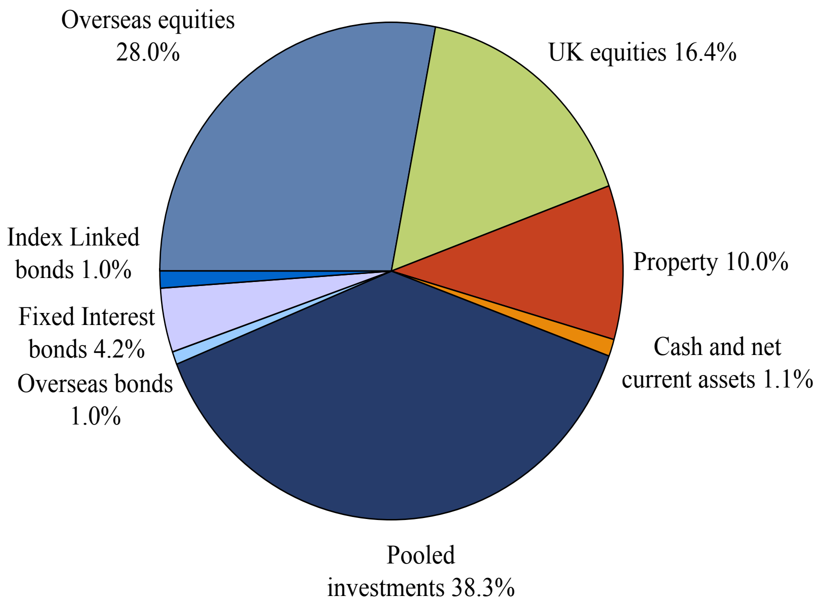
To carry out the valuation, we have obtained information on:

- 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 and D.

Assets

The Fund's assets had an audited market value of £3,726.5M at the Valuation Date, split as follows:



For presentational simplicity, the assets for defined contribution AVC accounts are excluded from both the assets and from the liability measures.

For further details, please see Appendix B.

Benefits valued

Members are entitled to benefits defined in the Regulations. A summary of the benefits valued is set out in Appendix C.

As stated above, for presentational simplicity, the assets for defined contribution AVC accounts are excluded from both the assets and from the liability measures.

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.

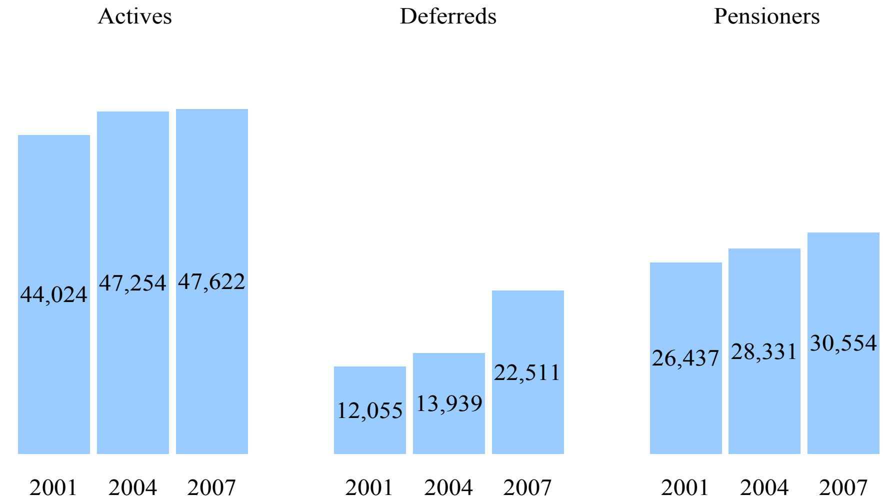
For the 2008 Scheme, for the purposes of this valuation, we have assumed that members will remain in the contribution band to which they are initially allocated. We have assumed that members will be allocated by reference to their level of pay in the data supplied to us.

The Government Actuary's Department have calculated that the cost of the third tier of ill health retirement may be approximately 0.1% of Pensionable Pay. We have made no allowance for this benefit because at the time of calculation the benefit changes had not been finalised potential. We have assumed that all ill-health retirements will fall into the first two tiers.

Membership data

The valuation calculations use membership data at 31 March 2007 supplied by Judith Marriott of South Tyneside Council.

The following chart illustrates how the membership profile is evolving. Please see Appendix D for a more comprehensive summary.



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 the information shown in the Fund's 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. The Funding Objective

Setting the funding objective

There are several factors which should be taken into account in setting the funding objective:

- The purpose of funding the Fund.
- An acceptable level of risk.
- The requirements of the Regulations.

We have described these factors below and then set out the funding objective which has been agreed for this valuation.

Purpose of funding

The purposes of funding are set out in the Scheme's **Funding Strategy Statement** and can be summarised as follows:

- To enable Employer contribution rates to be kept as stable as possible and affordable for the Fund's Employers.
- To make sure the Fund is always able to meet all its liabilities as they fall due.
- To manage Employers' liabilities effectively.
- To enable the income from investments to be maximised within reasonable risk parameters.

Risk

The funding purposes do not include provision of security of members' benefits, as these are guaranteed by Statute.

However, there is still the risk that the assets held in the Fund are not sufficient to pay all of the promised pensions at any given formal valuation, causing Employer contribution rates and possibly local taxation to rise. The risk depends on:

Funding risk

- The **funding target** may change;
- The assets may be less than the **funding target**;
- Future changes in mortality may increase the cost of benefits
- The investments may not deliver the outperfomance assumed.

Investment risk

- If the investment characteristics of the assets do not match those of the liabilities their values will not move in line. The risk is that the value of the assets falls without a corresponding fall in the value of the liabilities which can happen over a short space of time. The more mismatched the investment strategy is, the greater the risk.

There are various other risks that are less material. These include the potential exercise of options against the Fund, such as members commuting less pension than assumed.

Please refer to Section 8 for details of the impact of key risks on the Fund.

Regulations

This valuation is being carried out in accordance with the provisions of Regulation 77 of the Local Government Pension Scheme Regulations 1997 (as subsequently amended). Regulation 77 requires, amongst other things, that following such a valuation the Actuary must set

- a common rate of Employer's contribution and
- any individual adjustments.

The common rate of Employer's contribution is the amount which, in the Actuary's opinion, should be paid to the Fund by all bodies whose employees contribute to it so as to secure its solvency, expressed as a percentage of the Pensionable Pay of their employees who are active members. The Actuary must have regard to the existing and prospective liabilities of the Fund arising from circumstances common to all those bodies and the desirability of maintaining as nearly constant a rate as possible.

An individual adjustment is any percentage or amount by which, in the Actuary's opinion, contributions at the common rate should, in the case of a particular Employer, be increased or reduced by reason of any circumstances peculiar to that Employer.

The term 'solvency' is not defined in the Regulations. For the purposes of this valuation we have assumed that the Fund is deemed to be solvent when the market value of the assets is equal to the **funding target** described below. This is consistent with the description of solvency in the Authority's current **Funding Strategy Statement**.

The funding target

Pension scheme liabilities are a series of future cash payments. Other than immediate and deferred annuities provided by an insurance company or investment grade derivatives, other stock market assets that would provide a close match to these cash flows are a combination of fixed interest and index-linked gilts. Hence a **funding target** could be equal to the **present value** of the expected payments discounted at the market yields on gilts of appropriate term. The expected payments for active members would relate to Pensionable Service up to the valuation date and would include an allowance for expected future increases to Pensionable Pay.

However, it is common in the UK for Local Government Pension Funds not to hold assets which are equal to the full amount of the liabilities valued in this way. Instead, the Actuary and Authority agree a **funding target** at a lower level.

The **Funding Strategy Statement** sets out a definition of solvency as follows:

7.3 The Administering Authority defines solvency as being achieved when the value of the Fund's assets is greater than or equal to the value of the Fund's liabilities in respect of service prior to the measurement date when measured using 'ongoing' actuarial methods and assumptions.

7.4 Ongoing actuarial methods and assumptions are taken to be measurement by use of the Projected Unit method of valuation, using assumptions generally recognised as suitable for an open, ongoing UK pension fund with a sponsoring employer of sound covenant.

7.5 The financial assumptions used to assess the funding level will have regard to the yields available on long-term fixed interest and index linked gilt-edged investments.

7.6 The Administering Authority has also agreed with the Fund Actuary that the assumptions will make partial allowance for the higher long-term returns that are expected on the assets actually held by the Fund, and understands the risks of such an approach if those additional returns fail to materialise.

The Fund's assets are largely invested in asset classes that are expected to produce higher returns than gilts. The Authority has agreed that we should take part of these higher expected returns into account in the **funding target** and accepts the funding risks that this involves (as explained earlier in this section).

Volatility

We would expect the results of a series of valuations to be volatile. This could be reflected in potentially large changes at successive valuations both in the funding **shortfall** position and in the future service contribution rate.

Fluctuations in the future service contribution rate arguably reflect "true" changes in the future cost of benefits as expectations for future long-term levels of investment return and inflation fluctuate. However, much of the volatility in the funding **shortfall** position is likely to arise from relative movements between the Fund's assets and those assets that most closely match the underlying liabilities.

Speed of reaching funding target

An adjustment to the contribution rate is used to eliminate a funding **shortfall** over an agreed period of time (recovery period). The Authority has agreed that various periods, not exceeding 22 years from 1 April 2008, are appropriate for this purpose. Please see Appendix L for more details.

Comparison with funding objective for previous valuation	The adoption of a **funding target** which makes some advance allowance for investment returns in excess of those available on the low risk portfolio is consistent with the approach adopted for the 2004 valuation, though the degree of allowance is different.
Trigger for review	Valuations are required under the Regulations every three years so, in the normal course of events, the next valuation of the Fund will be carried out as at 31 March 2010. However, certain events can give rise to earlier reviews in respect of individual Employers such as the cessation of an Admitted Body or if emerging costs of retirements exceed the assumptions made. In such circumstances it may be necessary to issue revised Rates and Adjustments Certificates.

5. Method and Assumptions

Purpose of section

Building on the previous section which describes the **funding target**, this section sets out some of the key details of the method and assumptions used to calculate the **funding target** and the **recovery plan**. These have been agreed by the Authority. The assumptions are described in more detail in Appendices F, G and H.

We also describe how the approach taken for this valuation differs from that used for the previous valuation.

For the purposes pf this report, the description Scheduled Bodies includes all employers participating in the Fund which are not Admitted Bodies.

Key financial assumptions

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

Assumption	This valuation (% p.a.)	Previous valuation (% p.a.)	Comments on assumptions for this valuation
Inflation	3.2	2.9	This has been set using the level of inflation implied by the gilt markets at the Valuation Date
Pension increases	3.2 (pensions in excess of **GMPs**)	2.9 (pensions in excess of **GMPs**)	This is equal to the inflation assumption above.
	0.0 (**GMPs** accrued before 6 April 1988)	0.0 (**GMPs** accrued before 6 April 1988)	
	2.7 (**GMPs** accrued after 5 April 1988)	2.1 (**GMPs** accrued after 5 April 1988)	This is based on the inflation assumption above, an assumption about how much inflation varies each year, and the interaction of inflation with the maximum annual increase of 3% pa.
General pay increases	4.7	4.4	Assumed to be inflation plus 1.5% p.a.
Pre-retirement Discount rate (Scheduled Bodies)	6.6	6.2	This is equal to: • The yield on long dated gilts, PLUS • 1.9% pa, which is considered to be a prudent view of the expected outperformance (above gilt returns) of the Fund's assets

Post-retirement discount rate (Scheduled Bodies)	5.6	5.2	This is equal to: • The yield on long dated gilts, PLUS • 0.9% pa, which is considered to be a prudent view of the expected outperformance (above gilt returns) of the assets which it is anticipated that the Fund will hold to meet benefits in payment
In service discount rate (Admitted bodies)	6.2	6.2	This is equal to: • The yield on long dated gilts, PLUS • 1.5% pa, which is considered to be a prudent view of the expected outperformance (above gilt returns) of the Fund's assets
Left service discount rate (Admitted Bodies)	5.2	5.2	This is equal to: • The yield on long dated gilts, PLUS • 0.5% pa, which is considered to be a prudent view of the expected outperformance (above gilt returns) of the assets which it is anticipated that the Fund will hold to meet benefits in payment
[redacted]			[redacted]

The overall funding target

The **funding target** for the Fund as a whole is taken to be the sum of the **funding targets** for each participating Employer.

It should be noted that neither investing in assets with a higher expected return nor lowering the **funding target** reduces the cost of providing the promised benefits. Such assets bear a higher risk of under-performance which balances the higher expected returns. Other things being equal, if the **funding target** is lower, the Employers will pay:

- Lower contributions in the short term; but
- Higher contributions (than would otherwise have been payable) thereafter.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Interaction with transfer value terms

The individual **transfer value** terms for transfers payable are set centrally by the Government Actuary's Department, and are not dependent on the funding position of individual Funds. As such, the valuation results have no impact on the transfer terms.

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 future service contribution rate. The **Attained Age Method** has been used for some Employers who do not permit new employees to join the Fund. These calculations draw on the same assumptions used for the **funding target**.

In each case, no explicit allowance for new entrants has been made (but see below).

Allowance for additional returns in period to 31 March 2011

At the 2004 valuation, the Authority agreed that the contribution rates for Employers could be reduced due to assumed additional short term investment returns (over and above the **discount rate**) over 4 years from 1 April 2004.

At this valuation we have made no assumption of additional short term returns above the **discount rate**.

Stability of future service contribution rate

If:

- experience matches the assumptions underlying the **funding target**,
- the **funding target** remains unchanged
- the Fund remains closed to new entrants for those Employers for whom the **Attained Age Method** has been used and
- the membership profile remains stable for those Employers for whom the **Projected Unit Method** has been used,

then the future service contribution rate will:

- be broadly stable.
- generally drift upwards over time as a result of assumed chronological improvements in life expectancy and the impact of an ageing workforce in the employers closed to new entrants, tempered by a drift downwards from a reduction in the proportion of members with protected 'Rule of 85' retirement provisions.

If the funding objective changes, then contribution rates are likely to change.

Addressing the shortfall

The Authority has decided that the **shortfall** relative to the **funding target** at this valuation will be removed through payment of additional contributions, expressed as monetary amounts, by Employers over a range of different recovery periods (see Appendix L). The five largest Employers in the Fund will pay contributions over a recovery period of 22 years from 1 April 2008.

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

Stability of shortfall contribution rate

If the contributions above are expressed as a percentage of pay, then for those Employers for whom the **Projected Unit Method** has been used, the **shortfall** contribution rate will remain stable throughout the recovery period if the funding objective remains unchanged and all assumptions made are borne out in practice. For all Employers, **shortfall** contributions would be expected to cease at the end of the recovery period. In practice, the rate will tend to be reset at subsequent valuations.

If the funding objective changes, then contribution rates are likely to change.

Changes to funding objectives

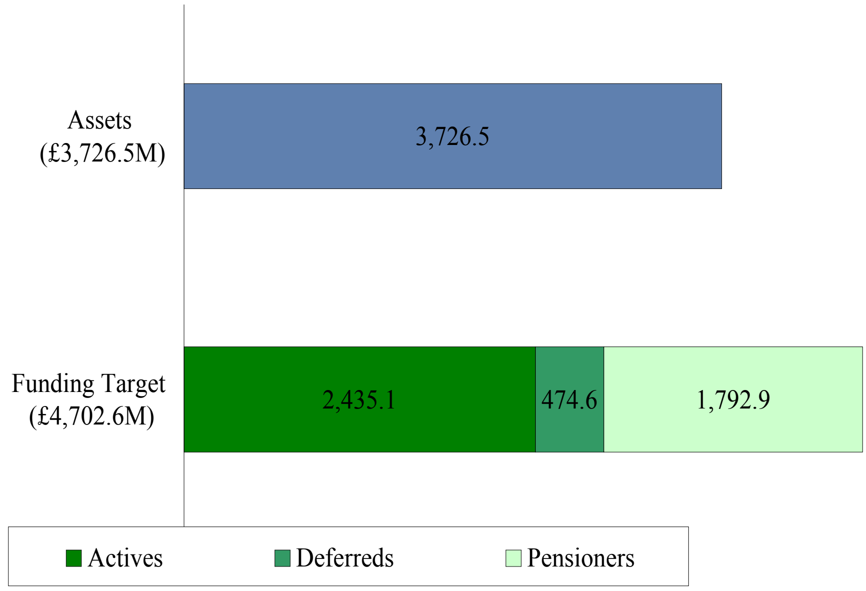
The funding objective for this valuation is to meet the agreed **funding target** as described in the **Funding Strategy Statement** and agreed with the Authority. This is a similar objective to the funding objective in the previous valuation. However, we would draw your attention to the following changes in approach:

- The assets are now taken at market value—previously a smoothing adjustment was applied to the assets, to dampen down the variability of future contribution requirements.
- There have been changes to the assumptions used, as summarised in this section.
- The period over which the **shortfall** is addressed has changed for most Employers. For a significant proportion of affected Employers, the recovery period has been reduced to 22 years from 1 April 2008. Other Employers have had their recovery periods changed due to reasons specific to their particular circumstances.

6. Funding Position and Future Service Contribution Rate

Agreed funding target

Here are the results of our calculation of the **funding target**, using the assumptions agreed by the Authority.



The **shortfall** of the assets relative to the **funding target** is £976.1M. This corresponds to a **funding ratio** of 79%.

[redacted]

[redacted]

[redacted]

The figures above are in £M with red bars reflecting factors that have worsened the funding position and blue bars those factors which have improved the funding position.

The analysis shows that the main factors affecting the funding position since the previous valuation are:

- the actual returns on the Fund assets, and
- additional Employer contributions paid, and
- the change in financial assumptions,

which have all improved the position,

- The removal of the smoothing adjustment to the assets used at the last valuation which had increased the value placed on the assets, and
- the reduction in gilt yields, and
- the change to the mortality assumption,

which have all worsened the position.

Future benefits

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

	% Pensionable Pay
New final salary benefits	20.7
Death in service lump sum	0.4
Administration expenses	0.3
Active member contributions *	(6.3)
Net Employer cost	15.1

* *AVCs are payable in addition*

[redacted]

[redacted]

[redacted]

The figures above are a percentage of Pensionable Pay with red bars indicating those factors which have increased the future service rate and the blue bars indicating those factors which have reduced the future service rate.

The "Introduction of the 2008 Scheme and extended protection" item includes various changes:

- Following the reinstatement of the Rule of 85 retirement age, this was subsequently removed
  - — for new entrants from 1 October 2006 for all service
  - — for existing members who did not qualify for protections for service from 1 April 2008.
- A new benefit structure was introduced for all members from 1 April 2008
- The protections for existing members to retire at the Rule of 85 age without reduction to their pension were extended

The analysis shows the upward pressure on the future service rate due to changes in benefit provision, improving longevity and gilt yields has only been partially offset by changes in member contributions and other assumptions.

7. Other Funding Targets

Low risk solvency measure

As noted in section 4, availability of assets to provide the benefits promised by the Fund could be guaranteed if the Fund held risk-free assets which exactly replicated the nature of the promises made.
In practice, although government fixed interest and index linked bonds (gilts) of appropriate nature and term come close to such risk free investments a fully ‘matched’ position is not attainable because the gilt market is not diverse enough, and there is always demographic risk which cannot be matched by the investments that are currently available. Hence the best that can be achieved is a “low risk” portfolio of gilts (or investment grade derivatives).

Within the constraints of the available investments, the Fund’s liabilities can be deemed to be the value of the benefit promises assuming that the assets held are gilts and the liabilities are discounted using the “low risk” rate of return (gilt yields). We have taken this to be our “low risk solvency measure”.

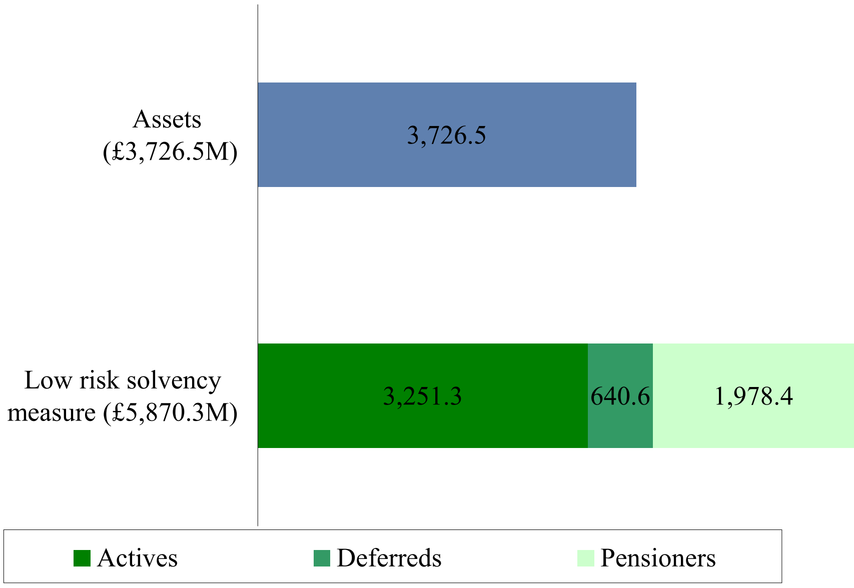
We show this measure for information purposes to give an indication of the level of risk inherent in the funding and investment strategy adopted by the Authority.

Assumptions for low risk measure

At the Valuation Date, yields on long dated fixed interest gilts were approximately 4.7% per annum. We have therefore evaluated the low risk liabilities using this **discount rate** and using all other assumptions as set out in section 5.

Low risk solvency measure

The results of our calculation of the low risk solvency measure in respect of past service are shown in the chart below.



The agreed **funding target** represents approximately 80% of the low risk solvency measure in respect of past service. The low risk **funding ratio** is 63%.

Position on discontinuance

It is a requirement of Actuarial Guidance Note 9 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 schemes 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.

Comparison with other local authority Funds

We are aware that it is common practice for the funding positions of local authority funds to be compared on a local or national basis. We would advise against such action in principle, since such a comparison tends to be misleading unless the assumptions used to evaluate the **funding target**s are similar between the comparator Funds. This is generally not the case, as individual Funds follow different funding strategies.

Cover for transfer values

At the Valuation Date, the assets of the Fund remaining after reserving for pensioner liabilities on the **funding target** represented 84% of the aggregate **transfer values** for active members and deferred pensioners (assuming in the case of active members that they left service on the Valuation Date entitled to deferred benefits).

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8. Risks and Sensitivity Analysis

Purpose of section

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

Key risks

Here are 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 invests 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 providing additional benefits to members. 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 **funding target**.

Quantifying the risks

To help the Authority understand the susceptibility of the funding position on the **funding target** basis, we have considered the impact of the following one-off step changes.

- The Pre-retirement **discount rate** is 0.5% p.a. higher
- The Post-retirement **discount rate** is 0.5% p.a. higher
- The Salary increase assumption is 0.5% p.a. higher
- Long cohort mortality projections are used rather than the medium cohort projections used at this valuation.
- The underpin to mortality improvements is 0.25% p.a. higher (see Appendix F for more details on the assumptions used at this valuation)
- Equities fall by 25% with no change in gilt yields.

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).

[redacted]

Implications

The analysis emphasises that the Fund is highly susceptible to:

- Equity markets falling. 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).
- Bond yields falling. This risk arises because the discount rate used in the valuation is linked to yields on government bonds. The funding level increases significantly if yields rise by 0.5% per annum, and would fall similarly if yields fell by a similar amount. 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 above.
- Members living longer than expected. This risk arises because final salary benefits must be paid as long as the beneficiaries are alive.

9. Summary and Conclusions

Headline results

Here are the headline results at the Valuation Date:

- There is a **shortfall** of £976.1M relative to the Fund's **funding target**. This corresponds to a **funding ratio** of 79%.
- The aggregate cost to the Employers of new benefits (including administration expenses) is 15.1% of Pensionable Pay.
- The low risk past service **funding ratio** is 63%.

Individual Employer rates set by the Actuary

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

- The Regulations – see section 4
- The funding objective and the funding strategy as set out in the **Funding Strategy Statement** – see section 4;
- The results of the valuation;
- Discussions between the Actuary, the Authority and Employers;

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.

Contribution rates for Employers who contribute to the Fund are set out in the Rates and Adjustments Certificate in Appendix M. In accordance with the Funding Strategy Statement increases in certain Employers' rates are being introduced over periods not exceeding 6 years.

Overall contribution rate

The overall contribution rate applicable from 1 April 2008 to 31 March 2011 can be summarised as follows:

	% Pensionable Pay
Long-term rate	15.1
Deficit funding (22 years from 1 April 2008)	6.0
Overall contribution rate	21.1

If our assumptions are borne out in practice, we would expect Employers to contribute at these rates (or the ultimate rate where the rate payable is being stepped up to the required rate) for the remainder of the recovery period before reverting to the future service rate applicable to each Employer.

Timing and frequency of contributions

Contributions by active members and Employers should be paid by Employers to the Fund or to the Authority, as required by Regulations 79 to 81 of the 1997 Regulations, or Regulations 39 to 42 of the Administration Regulations, as appropriate.

Investment strategy

The Fund has a mismatched investment strategy. We recommend that the Authority monitors the level of risk inherent in this approach from time to time by means of an asset/liability study or similar evaluation technique.

Monitoring the Fund

In light of the volatility inherent where investments do not match liabilities, the Authority may wish to monitor the financial position in an appropriate manner on a quarterly basis. The next formal valuation is due to take place as at 31 March 2010.

Developments since the Valuation Date

Since the Valuation Date, markets have been volatile. Index-linked gilt yields have fallen by about 0.6% per annum, whilst fixed interest gilt yields have fallen by about 0.1% per annum. In addition, the UK equity market has declined by about 10%.

These developments will have worsened the financial position of the Fund relative to the **funding target** (calculated with financial assumptions updated in line with market movements).

If the deterioration in financial markets is not reversed before the next actuarial valuation (due to be carried out as at 31 March 2010), contributions may increase following that exercise.

Signed on behalf of Hewitt Bacon & Woodrow Limited

Timothy Lunn FIA

Becky Durran FIA

Appendix A—More Small Print

Purpose of small print

This appendix sets out some important information about the legal and actuarial framework under which this report is issued.

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:

- Regulation 77 of the Local Government Pension Scheme Regulations 1997 (as amended).
- The terms of the Agreement between us and the Authority, on the understanding that it is solely for the benefit of the addressees.

Unless prior written consent has been given by Hewitt Bacon & Woodrow 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
- Communities and Local Government
- The Government Actuary's Department

None of the above bodies have our permission to pass our report on to other parties.

Notwithstanding such consent, Hewitt Bacon & Woodrow Limited does not accept or assume any responsibility to anyone other than the addressees of this report.

Professional Guidance

This report has been prepared in accordance with version 8.1 of actuarial 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 deficit 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 2007 show its assets as £3,726.5M, invested as follows:

Asset type	Market value (£M)	% of Total
Overseas equities	1,045.2	28.0
UK equities	610.9	16.4
Property	373.7	10.0
Pooled investments	1,426.7	38.3
Fixed Interest	157.7	4.2
Overseas Bonds	36.5	1.0
Index Linked Bonds	36.1	1.0
Cash and net current assets	39.7	1.1
Total	3,726.5	100.0

For presentational simplicity, the assets for defined contribution AVC accounts are excluded from both the assets and from the liability measures.

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 Regulations 1997 as subsequently amended. A broad summary of the benefits currently payable by the LGPS to contributory members as at the Valuation Date is given below.

Additionally, a new benefit structure is to come into force with effect from 1 April 2008. The benefits are described principally in the Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 as amended. A broad summary of the benefits that will apply from 1 April 2008 is also given below.

Finally, a significant number of benefit changes have occurred since the last valuation, leading to the current benefit structure described below. A description of the major benefit changes follows the benefit summary.

Readers should refer to the Regulations for further details.

Scheme	Current Scheme	New Scheme in force from 1 April 2008
Normal Retirement Age	65	65
Member Contributions	6% of Pensionable Pay Certain categories of former manual workers pay 5% of Pay	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, the best three year average level of Pay over the ten years prior to retirement or earlier exit.	Generally Pensionable Pay over the 12 months prior to retirement or earlier exit or, if higher, the best three year average level of Pay over the ten years prior to retirement or earlier exit
Normal Retirement Pension	1/80 of Final Pay for each year of Pensionable Service.	1/60 of Final Pay for each year of pensionable service

Scheme	Current Scheme	New Scheme in force from 1 April 2008
Lump Sum	3/80 of Final Pay for each year of Pensionable Service. Pension can be surrendered for an additional lump sum so that the total lump sum is one quarter of the total value of the benefits. Conversion rate is £12 for each £1pa of pension given up.	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 £1pa of pension given up.
Early Retirement Pension	Reduced pension and lump sum payable on retirement after age 60, or after age 50 with Employer consent. Pension and lump sum calculated as for normal retirement but based on service to early retirement. Members who joined the Fund before 1 October 2006 can retire on unreduced pension if their age plus service is greater than or equal to 85 years.	Reduced pension payable on retirement after age 60, or after age 50 with Employer consent. Pension calculated as for normal retirement but based on service to early retirement. Certain categories of member eligible for protection can retire on unreduced pension if their age plus service is greater than or equal to 85 years.
Incapacity and Ill Health Pensions	Pension and lump sum payable to members with more than 2 years' service based on Final Pay at exit and enhanced service. Service enhancement is a non-linear scale based on service completed to exit. To qualify for this benefit members must be permanently incapable of efficiently discharging their duties.	Upper tier – payable to members with more than 2 years' service based on Final Pay at exit and potential service that would have been completed to age 65. To qualify for this benefit there must be no reasonable prospect of obtaining employment before Normal Retirement Age. Middle tier – payable to members with more than 2 years' 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 capable of obtaining gainful employment at some point before Normal Retirement Age. Lower tier – currently under consultation . In each case members must also be permanently incapable of efficiently discharging their duties to qualify.

Scheme	Current Scheme	New Scheme in force from 1 April 2008
Leaving Service	Pension and lump sum payable on retirement at age 65 based on Final Pay at exit and service to date of exit. Certain categories of member can retire early on unreduced pension if over age 60 and their age plus service is greater than or equal to 85 years.	Pension payable on retirement at age 65 based on Final Pay at exit and service to date of exit. Certain categories of member can retire early on unreduced pension if over age 60 and their age plus service is greater than or equal to 85 years.
Pension Increases	Pensions in payment in excess of Guaranteed Minimum Pensions are increased each year in line with the annual increase in the Retail Prices Index. Deferred pensions are similarly increased in deferment. Guaranteed Minimum Pensions 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 the annual increase in the Retail Prices Index.	Pensions in payment in excess of Guaranteed Minimum Pensions are increased each year in line with the annual increase in the Retail Prices Index. Deferred pensions are similarly increased in deferment. Guaranteed Minimum Pensions 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 the annual increase in the Retail Prices Index.
Death Benefits	A lump sum of 2 x Pay at exit A spouse'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 occurred at the date of death.	A lump sum of 3 x 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 the upper tier occurred at the date of death.
State Pension Scheme	The Scheme is contracted out of the State Second Pension Scheme.	The Scheme is contracted out of the State Second Pension Scheme.

Key benefit changes since the last valuation

There have been a number of amending Regulations made since the last valuation, the most important of which were:

The Local Government Pension Scheme (Amendment) Regulations 2005 came into force on 3 August 2005 and reinstated the rule of 85 retirement provisions. Their impact was retrospective in that they returned the scheme to the position that would have applied if the Local Government Pension Scheme (Amendment)(No. 2) Regulations 2004 had not been enacted. They also included a number of minor consequential amendments and protections for members.

The Local Government Pension Scheme (Amendment) Regulations 2006 came into force at three separate dates.

- With effect from 1 April 2006 the option for members to commute pension at a conversion rate of £12 for each £1pa of pension was introduced.
- With effect from 6 April 2006, the new taxation regime introduced by the Finance Act 2004 was made applicable to the Scheme.
- With effect from 1 October 2006 the Rule of 85 retirement provisions were once again removed from the Scheme. Transitional protections were put in place for various categories of member, the extent of these protections being similar to those that had been contained in the Local Government Pension Scheme (Amendment)(No.2) Regulations 2004.

The Local Government Pension Scheme (Amendment)(No.2) Regulations 2006 came into force on 1 October 2006. They made a number of minor amendments relating to the changes made at 1 and 6 April. They also extended the transitional protections in respect of the removal of the Rule of 85 retirement provisions.

The Local Government Pension Scheme (Amendment) Regulations 2007 came into force on 2 March 2007. They made a number of regulatory changes in respect of specific Employers and their ability or otherwise to participate in the Scheme.

The Local Government Pension Scheme (Amendment)(No.2) Regulations 2007 came into force on 21 June 2007. They made a number of minor and corrective provisions, mostly in relation to the new tax regime.

The Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 come into force on 1 April 2008. They set out the main components of the benefit structure of the new 2008 scheme.

The Local Government Pension Scheme (Transitional Provisions) Regulations 2008 come into force on 1 April 2008. These Regulations provide the means of calculating benefits in circumstances where members' total period of membership includes rights accruing under both the 1997 Regulations and the Benefits Regulations. They also revoke many provisions of the 1997 Regulations and make certain savings provisions to protect the benefits accrued by members of the 1997 Scheme who left before 1 April 2008.

The Local Government Pension Scheme (Administration) Regulations 2008 come into force on 1 April 2008. These Regulations are similar to those under the 1997 Scheme which dealt with administration. The Regulations replicate provisions of the 1997 Scheme that remain relevant, include recent innovations such as the requirements for each authority to publish a pension fund annual report and a governance compliance statement, and also make the changes needed to reflect the details of the benefit package and the different rules on members' contributions under the new Scheme as set out in the Benefits Regulations.

Appendix D—Membership Data

Active members at 31 March 2007						
		Number	**Average Age**	**Total Pay (£000 p.a.)**	**Average Pay (£ p.a.)**	**Average Service (years)**
Men	2007	18,464	44.7	404,351	21,899	13.3
	2004	*18,766*	*44.6*	*370,951*	*19,767*	*12.8*
Women	2007	29,158	43.5	436,597	14,973	7.8
	2004	*28,488*	*42.8*	*392,807*	*13,789*	*7.3*
Total	2007	47,622	44.0	840,948	17,659	9.9
	2004	*47,254*	*43.7*	*763,758*	*16,163*	*9.5*

Note: Pay for 2007 is that over the year to 31 March 2007.
Part time pay is included for part-timers. Annualised pay is included for entrants in the last year.

Deferred Pensioners at 31 March 2007					
		Number	**Average Age**	**Total Pensions (£M p.a.)**	**Average Pension (£p.a.)**
Men	2007	8,926	43.7	16.9	1,893
	2004	*6,167*	*46.4*	*11.8*	*1,913*
Women	2007	13,585	44.1	14.8	1,086
	2004	*7,772*	*45.4*	*9.6*	*1,235*
Total	2007	22,511	43.9	31.7	1,406
	2004	*13,939*	*45.8*	*21.4*	*1,542*

Note: The deferred pensions have been increased to the Valuation Date and exclude increases granted in 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.

Pensioners at 31 March 2007					
		Number	**Average Age**	**Total Pensions (£M p.a.)**	**Average Pension (£p.a.)**
Men	2007	13,400	67.3	73.6	5,493
	2004	*13,102*	*65.1*	*63.4*	*4,839*
Women	2007	12,500	67.5	35.0	2,800
	2004	*10,952*	*65.6*	*28.1*	*2,566*
Dependants	2007	4,654	70.4	10.1	2,170
	2004	*4,277*	*73.3*	*8.5*	*1,987*
Total	2007	30,554	67.9	118.7	3,885
	2004	*28,331*	*66.5*	*100.0*	*3,530*

Note: In addition there were 342 children (336 in 2004) who are in receipt of pensions. Suitable allowance has been made for these in our calculations
The pension includes increases granted in April 2007.

Appendix E—Membership Data by Employer

Employer code	Employer name	Number of active members	Total pensionable pay of active members (£000s)	Number of deferred members	Number of pensioner and dependant members
1	Gateshead MBC	6,784	111,591	3,576	4,893
2	Newcastle upon Tyne CC	8,679	156,620	3,967	6,787
3	North Tyneside MBC	5,937	98,056	2,789	3,874
4	South Tyneside MBC	4,924	75,245	2,719	3,461
5	City of Sunderland	8,506	136,907	4,245	5,710
6	Brunswick Young Peoples Project	1	20	4	0
7	Gentoo Group Ltd	564	11,621	111	10
8	Tyne & Wear Small Business Services	34	1,132	8	8
9	MLAANE	15	386	10	3
10	Birtley Town Council	0	0	4	4
11	Stagecoach Travel Services (Busways)	229	4,718	207	545
12	University of Northumbria at Newcastle	1,429	28,418	705	523
13	Northumbria Police Authority	2,107	39,935	699	921
14	Northumbria Probation and After-Care Service	666	16,264	178	284
15	University of Sunderland	819	17,190	535	312
16	Tyne & Wear Fire and Civil Defence Authority	297	5,459	98	184
17	Tyne & Wear Passenger Transport Authority	98	2,277	30	83
18	Nexus	963	23,222	444	1,403
20	Age Concern Newcastle	50	726	29	25
21	Catholic Care North East / St Cathberts Care	0	0	20	26
22	Information North (NRLS)	0	0	0	3
23	Newcastle Community Law Centre	8	182	3	2
24	Newcastle International Airport Co Ltd	213	5,792	268	302
25	Disability North	15	266	19	5
26	Newcastle Family Service Unit	0	0	4	3
27	North East Innovation and Development Co Ltd	0	0	19	13
28	AQA	0	0	3	12
29	North Eastern Regional Employers Organisation	7	256	1	5
30	Northern Arts Association	0	0	33	12
31	Northern Council for Further Education	0	0	15	12
32	Northern Counties School for the Deaf	2	26	21	22
33	Association of North East Councils	37	1,267	10	6
34	Northumbria Tourist Board	0	0	30	9
35	Kenton Park Sports Centre	6	43	5	0
36	Port of Tyne Authority	0	0	0	5
37	Praxis Service	1	69	3	0

Employer code	Employer name	Number of active members	Total pensionable pay of active members (£000s)	Number of deferred members	Number of pensioner and dependant members
38	Search Project	2	53	1	2
39	Valley Citizens Advice Bureau	0	0	2	0
40	St Mary Magdalen and Holy Jesus Charity	8	169	6	3
41	Sunderland Empire Theatre Trust Ltd	0	0	7	5
43	Sunderland Outdoor Activities Association	0	0	3	0
44	The Ozman House Probation Hostel Committee	20	447	18	6
45	Theatre Royal Trust Ltd	49	749	23	15
46	Tyne & Wear Development Corporation	0	0	27	23
47	Tyne & Wear Enterprise Trust Ltd / Entrust	16	435	15	12
48	Tyne Theatre Trust	0	0	0	0
49	Tyne & Wear Development Co Ltd	11	296	12	4
50	Tyneside TEC	0	0	44	30
51	Wallsend Citizens Advice Centre/ North Tyneside CAB	0	0	2	1
52	Wallsend Peoples Centre	2	37	2	2
53	Workshops for the Adult Blind	0	0	15	85
54	Sunderland City Training & Enterprise Council / Wearside TBC	0	0	45	23
55	South Tyneside Groundwork Trust	4	129	3	3
57	City of Sunderland College	450	7,833	161	60
58	Gateshead College	203	3,556	149	62
59	Newcastle College	700	11,316	317	128
60	North Tyneside College	6	53	67	20
61	Tynemouth College	5	42	28	7
62	South Tyneside College	269	4,104	118	119
63	Wearside College	0	0	4	10
64	Tyne Waste Limited	0	0	10	11
65	Newcastle West End Partnership	0	0	2	0
66	North Tyneside City Challenge	0	0	4	1
68	Newcastle Youth Congress	0	0	2	0
69	Gateshead Law Centre	7	161	7	1
70	Newcastle Tenants Federation	5	128	2	1
71	Hebburn Neighbourhood Advice	4	81	2	0
73	Child Care Enterprise	3	101	16	1
74	Learning World	0	0	8	0
75	Norcare	0	0	1	1
76	National Glass Centre	1	53	1	1
77	North Tyneside Disability Advice Centre	0	0	0	1
79	International Centre For Life Trust	14	543	5	2
80	Monkwearmouth College	0	0	1	5
81	Simonside Community Centre	1	5	0	0
82	Tyne and Wear Play Association	1	26	0	0
84	Ouseburn Trust	0	0	1	0
87	Newcastle Education Action Zone	0	0	2	2
88	South Tyneside Education Action Zone	0	0	2	0
89	South Tyneside Victim Support	0	0	2	0
90	Benton Grange School	0	0	0	9
91	One North East	0	0	2	7

Employer code	Employer name	Number of active members	Total pensionable pay of active members (£000s)	Number of deferred members	Number of pensioner and dependant members
92	HEFCE	0	0	2	8
93	Tyne & Wear County Council	0	0	88	277
94	Tyne & Wear Residuary Body	0	0	5	30
95	North East Regional Airport	0	0	0	32
96	Passenger Transport Company	0	0	0	95
97	Your Homes Newcastle	652	14,129	74	41
98	Hospital of St Mary the Virgin	0	0	0	1
102	Blue Square Trading Ltd	9	189	5	1
103	Gateshead Magistrates	0	0	10	16
104	Newcastle Magistrates	0	0	15	16
105	North Tyneside Magistrates	0	0	7	8
106	South Tyneside Magistrates	0	0	5	21
107	Sunderland Magistrates	0	0	6	20
108	Newcastle Healthy City Project	18	394	6	0
109	Norland Road Community Centre	0	0	1	0
110	Gentoo Group Ltd (TUPE)	883	20,445	171	142
111	Thomas Gaughan Community Centre	1	24	1	0
112	Raich Carter Sports Centre	33	325	18	0
113	Tyneside Deaf Youth Project	0	0	3	0
114	Sunderland EAZ	0	0	0	1
115	Baltic Flour Mills Visual Arts	5	144	4	0
117	Jarvis - Sandhill View	5	43	1	1
47031	National Car Parks	6	111	2	3
47032	Bovis Lend Lease	9	137	0	0
47033	Scolarest (Newcastle)	26	181	1	2
47034	Mitie Cleaning (North) Ltd (Newcastle)	0	0	1	0
47038	Benwell Young Peoples Development Project	2	45	0	0
47039	Managed Business Space	2	54	0	1
47040	Sunderland Streetlighting	57	1,457	7	5
47041	Mitie PFI Limited (North Tyneside)	1	12	0	0
47042	Scolarest	5	38	0	0
47043	Gateshead Housing Company	338	6,414	51	11
47044	No Limits Theatre Group	2	54	0	0
47047	Morrison Facilities Serv Ltd	62	1,423	4	2
47048	Jarvis Accommodation Serv Ltd	6	30	0	0
47049	Walker Profiles (NE) Ltd	30	614	1	0
47050	Southern Electric Contracting	27	726	4	3
47051	Tyne Metropolitan College	185	2,965	47	10
47052	CBS Outdoor Ltd	1	24	1	0
47053	Community Action On Health	7	182	0	0
47054	Northern Grid for Learning	9	289	0	0
47056	Morrison Facilities Sv Ltd 2	322	6,900	6	5
47060	Percy Hedley Foundation	28	495	0	1
47061	Balfour Beatty	23	552	0	0
47062	South Tyne Football Trust	1	28	0	0
47063	South Tyneside Homes	691	14,482	14	13
47083	Mitie Pfi (Boldon)	3	23	0	0

Note: Pay is that over the year to 31 March 2007.
Part time pay is included for part-timers. Annualised pay is included for entrants in the last year.

Appendix F—Assumptions for agreed funding target

The assumptions used for assessing the **funding target** are summarised below.

Financial Assumptions

Scheduled Bodies	
Pre-retirement Discount rate	6.6% p.a.
Post-retirement Discount rate	5.6% p.a.
Admitted Bodies	
In service Discount rate	6.2% p.a.
Left service Discount rate	5.2% p.a.
Rate of pay increases (additional to promotional increases)	4.7% p.a.
Rate of price inflation	3.2% p.a.
Rate of pension increases (on benefits in excess of GMPs)	3.2% p.a.
Rate of pension increases on post-88 GMPs	2.7% p.a.
Rate of deferred pension increases	3.2% p.a.
Rate of GMP increases in deferment	3.2% p.a.

Demographic Assumptions

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Appendix G—Assumptions for other funding measures

The assumptions used for assessing the other funding measures referred to in Section 7 of the report are summarised below.

Low Risk Basis

Financial Assumptions

Pre-retirement discount rate	4.7% p.a.
Post-retirement discount rate	4.7% p.a.
Rate of pay increases (additional to promotional increases)	4.7% p.a.
Rate of price inflation	3.2% p.a.
Rate of pension increases (on benefits in excess of GMPs)	3.2% p.a.
Rate of pension increases on post-88 GMPs	2.7% p.a.
Rate of deferred pension increases	3.2% p.a.
Rate of GMP increases in deferment	3.2% p.a.

Demographic Assumptions

Demographic assumptions	Demographic assumptions used for other funding measures are the same as set out in Appendix F.

Appendix H – Assumptions for post retirement mortality

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Appendix I—Consolidated Revenue Account

Consolidated Revenue Account

		Total £000
Fund at 31 March 2004		**2,355,676**
Income		
Contributions	Employer	483,318
	Employee	145,177
Transfers-in		48,900
Investment income		189,290
Total income		***866,685***
Outgo		
Pensions paid		352,745
Lump sums		61,778
Transfers-out		52,513
Refunds of contributions on leaving		911
Death Benefits Paid		7,480
State Scheme Premiums		381
Expenses of investment		19,321
Expenses of administration		6,388
Recharges		-31,397
Total outgo		***470,120***
Change in market value		**974,264**
Fund at 31 March 2007		**3,726,505**

Appendix J—Membership Experience

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Appendix K—Current Contribution Rates

	Current Rate (% members' contributions)	Current amount (£000s)
Gateshead MBC	238	7,838
Newcastle upon Tyne CC	248	10,858
North Tyneside MBC	241	6,157
South Tyneside MBC	239	5,758
City of Sunderland Council	230	10,397
Nexus	286	4,352
Stagecoach Travel Services (Busways)	395	1,403
Tyne & Wear Passenger Transport Authority	251	1,049
Baltic Flour Mills Visual Arts	157	0.641
Bovis Lend Lease	253	0.135
Blakelaw and North Fenham Parish Council	250	0
Birtley Town Council	305	5.041
Gateshead Housing Company	232	242
Jarvis - Sandhill View	350	1.920
Mitie PFI LTD Newcastle Schools PFI	251	
Mitie PFI LTD N Tyne Schools PFI	246	0
National Car Parks	332	1.158
Newcastle International Airport	230	661
Northumbria Probation and After-Care Service	243	2,074
Northumbria Police Authority	218	1,689
Sunderland Housing Group	290	527
Sunderland Streetlighting	287	1.873
Scolarest (Newcastle)	301	0
Scolarest (North Tyneside)	255	0.063
Tyne & Wear Fire and Civil Defence Authority	267	329
Northumbria University	229	1,576
University of Sunderland	234	1,092
Blue Square Trading Company	269	14.428
Your Homes Newcastle	230	0
City of Sunderland College	219	244
Gateshead College	219	151
Newcastle College	219	261
North Tyneside College	219	85
Tynemouth College	219	30
South Tyneside College	219	153
Brunswick Young Peoples Project	225	0.453
NEMLAC	225	14.246
Newcastle Community Law Centre	225	3.709
Disability North	225	31.837
North Eastern Regional Employers Organisation	225	37.257
Northern Council for Further Education	225	84.409
Northern Counties School for the Deaf	225	52.366
Association of North East Councils	225	85.274
Kenton Park Sports Centre	225	1.115
Praxis Service	225	25.699
Search Project	225	10.352
St Mary Magdalen and Holy Jesus Charity	225	20.999

	Current Rate (% members' contributions)	Current amount (£000s)
Ozanam House Probation Hostel Committee	225	23.382
Theatre Royal Trust Ltd	225	23.508
Tyne & Wear Development Co Ltd	225	33.408
Gateshead Law Centre	225	2.807
Newcastle Tenants Confederation	225	6.159
Hebburn Neighbourhood Advice	225	2.197
International Centre For Life Trust	225	28.225
Simmonside Community Centre	225	0.045
Tyne and Wear Play Association	225	2.578
Newcastle Healthy City Project	225	5.040
Thomas Gaughan Community Centre	225	1.623
Raich Carter Sports Centre	225	5.388
Benwell Young Peoples Development Project	225	0.18
Tyne & Wear Small Business Group	277	100.098
Age Concern	277	40.261
Tyne & Wear Enterprise Trust Ltd	277	45.507
Wallsend Peoples Centre	277	4.387
South Tyneside Groundwork Trust	277	22.603
Childcare Enterprise Ltd.	277	7.521
Managed Business Space	277	2.646
Information North		1.794
Newcastle Family Service Unit		5.639
Port of Tyne Authority		4.406
Valley CAB		0.324
Sunderland Empire Theatre Trust Ltd		16.453
Wallsend Citizens Advice Centre		1.824
Norcare		2.452
National Glass Centre	225	2.024
North Tyneside Disability Advice Centre		0.758
One North East		6.946
Hospital of St Mary the Virgin		1.8
Norland Road Community Centre		0.077
Northumbria Magistrates Court Committee		143
Balfour Beatty	415	0
CBS Outdoor Ltd	205	0
Jarvis Accommodation Serv Ltd	380	0
Mitie Pfi (Boldon)	380	0
Morrison Facilities Serv Ltd	365	0
Morrison Facilities Serv Ltd 2	320	0
No Limit Theatre Group	205	0
Southern Electric Contracting	275	0
South Tyneside Homes	300	684
Walker Profiles (NE) Ltd	320	0

Appendix L—Employer Recovery Periods and Groups

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Appendix M—Rates and Adjustments Certificate

In accordance with Regulation 77 of the Local Government Pension Scheme Regulations 1997, we certify that contributions should be paid by Employers at the following rates for the period 1 April 2008 to 31 March 2011.

A common rate under Regulation 77(3)(a) of the existing regulations or Regulation 36(4)(a) of the Administration Regulations of 15.1% of Pensionable Pay.

Individual adjustments under Regulation 77(3)(b) of the existing regulations or Regulation 36(4)(b) of the Administration Regulations which, when added to or subtracted from the common rate, produce the following Employer contribution rates

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In addition, any extra liabilities falling on the Fund in respect of retirements under Regulations 26, 31 or 35 of the 1997 Regulations or Regulations 18, 19 or 30 of the Benefit Regulations should be financed by additional Employer contributions, calculated in a manner advised by the actuary, and payable over a period of up to three years.

In addition, any additional benefits granted under Regulation 52 of the 1997 Regulations or Regulations 12 or 13 of the Benefit Regulations should be financed by additional Employer contributions, either under Regulation 80 of the 1997 Regulations or Regulation 40 of the Administration Regulations, or as calculated in a manner advised by the actuary.

Contribution rates for Employers commencing participation in the Fund after 31 March 2007 will be advised separately.

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

For Hewitt Bacon & Woodrow
40 Queen Square
Bristol
BS1 4QP

T N Lunn
27 March 2008

R C Durran
27 March 2008

Notes to Actuary's Certificate

References to the existing Regulations refer to the Local Government Pension Scheme Regulations 1997 (as subsequently amended).

References to the Administration Regulations refer to the Local Government Pension Scheme (Administration) Regulations 2008 (as subsequently amended).

References to the Benefit Regulations refer to the Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 (as subsequently amended).

The contribution rates certified overleaf have been assessed using the actuarial methods and assumptions detailed in our report dated 27 March 2008.

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 2007 to 31 March 2011**	
	Numbers	**New Pension (£000s)**
[redacted]	[redacted]	[redacted]
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 where the 'rule of 85' age is also below age 60. The Authority requires separate funding of liabilities arising from such retirements and, as such, the financial impact of these retirements is neutral	
[redacted]	[redacted]	[redacted]
Comments on Funding	Such retirements increase costs due to the early payment of enhanced benefits. If actual retirements exceed anticipated, and no action is taken before the next valuation, this would be identified as a source of loss at the next valuation. In accordance with Regulation 78(3)(b) of the 1997 regulations (Regulation 38(5)(b) of the Administration regulations) the Authority should monitor the number of ill-health retirements arising over each Fund year and refer the position to the Actuary if numbers exceed the levels implied above.	
Severance and redundancy under Regulation 26 of the 1997 Regulations or Regulation 19 of the Benefit Regulations	Nil	Nil
Comments on Funding	Such retirements increases costs due to the early payment of benefits. Any enhancement of benefits through the Fund via added years would increase costs further. If actual retirements exceeded 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 35 of the 1997 Regulations or Regulation 18 of the Benefit Regulations	Nil	Nil
Comments on Funding	Such retirements may increase costs due to the early payment of benefits. If actual retirements exceed 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

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.
Discount rate	This is used to place a **present value** on a future payment. A “risk-free” **discount rate** is usually derived from the investment return achievable by investing in government gilt-edged stock. A **discount rate** higher than the “risk-free” rate is often used to allow for some of the extra investment return that is expected by investing in assets other than gilts.
Funding ratio	This is the ratio of the value of assets to the **funding target**.
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.
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.
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.
Recovery plan	Where a valuation shows a funding **shortfall** against the funding target **a recovery plan** is designed to restore the **funding ratio** to 100%**.**
Shortfall	This is the **funding target** less the value of assets. If the value of assets is greater than the **funding target,** then the difference is called the **surplus**.
Funding Strategy Statement	A document produced by the Authority in accordance with Regulation 76A, which sets out the funding strategy adopted for the Fund. The statement is produced and maintained in consultation with the Fund Employers and the actuary. The actuary must have regard to this statement in preparing the valuation under Regulation 77.
Surplus	This is the value of assets less the **funding target**. If the **funding target** is greater than the value of assets, then the difference is called the **shortfall**.
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.