

# Buckinghamshire County Council Pension Fund

Actuarial Valuation as at 31 March 2010  
Valuation Report

**Barnett Waddingham**  
Public Sector Consulting

19 May 2011

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Dear Sirs

## **Actuarial Valuation as at 31 March 2010**

We have carried out an actuarial valuation of the Buckinghamshire County Council Pension Fund (“the Fund”) as at 31 March 2010. The Fund is part of the Local Government Pension Scheme (“LGPS”).

The valuation is being carried out in accordance with Regulation 36 of The Local Government Pension Scheme (Administration) Regulations 2008 (“the Regulations”) as amended.

The purpose of this report is to set out the results of the actuarial valuation of the Fund.

This report is addressed to the Buckinghamshire County Council as administering authority to the Fund. It is not intended to assist any user other than Buckinghamshire County Council in making decisions. Neither we nor Barnett Waddingham LLP accepts any liability to third parties in respect of this report.

This report has been written in accordance with “Technical Accounting Standard R: Reporting Actuarial Information” and “Technical Actuarial Standard D: Data” issued by the Board for Actuarial Standards and actuarial guidance note “GN9: Funding Defined Benefits – presentation of actuarial advice”, insofar as they apply to the LGPS.

Our report is set out in the following sections.

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# **1 Introduction**

## **1.1 Purpose of the Valuation**

- 1.1.1 The main purpose of the valuation is to review the financial position of the Fund and to determine the rate at which the employing bodies participating in the Fund should contribute in the future to ensure that the existing assets and future contributions will be sufficient to meet future benefit payments from the Fund.
- 1.1.2 The figures in this report count as part of a “planning exercise” for the purposes of the Board for Actuarial Standards’ Technical Actuarial Standard R. This means the primary purpose of the figures is for “budgeting” or “target setting” – in this case setting the future levels of employer contributions payable to the Fund.

## **1.2 Previous Valuation**

- 1.2.1 The last formal actuarial valuation of the Fund was carried out as at 31 March 2007 by Barnett Waddingham and the results of that valuation were set out in the formal valuation report dated March 2008.
- 1.2.2 The results of the previous valuation indicated that the assets of the Fund represented 81.5% of the accrued liabilities of the Fund. The Total Required Contribution Rate was certified as 19.2% of payroll which assumed that the past service funding level would be restored over a period of 20 years.

## **1.3 Changes to the LGPS**

- 1.3.1 The 2010 Emergency Budget announced that in future, the pension increase orders will be linked to the Consumer Price Index or CPI rather than RPI.
- 1.3.2 Also, it was announced that State Pension Age will be increased to age 66 for both men and women from 2020 which is likely to influence future retirement patterns.
- 1.3.3 A report has recently been issued by an independent pensions commission led by Lord Hutton to investigate pension reform across the public sector.
- 1.3.4 His report contains a number of recommendations which are likely to lead to some changes to the LGPS in future although at this stage it is difficult to assess the detail of what they might be. The Chancellor has also indicated that the level of member contribution should be expected to increase at some point in future. We anticipate that these changes will be closer to being finalised by the date of the next valuation.
- 1.3.5 Full details of the current benefits and contribution structure are set out in Appendix 6.

## 2 Valuation Data

### 2.1 Data Sources

2.1.1 We have used the following items of data as provided by Buckinghamshire County Council.

- Membership extract as at 31 March 2010. The membership data has been checked for reasonableness and any missing or inconsistent data has been estimated where necessary. Whilst this should not be seen as a full audit of the data, we are happy that the data is sufficiently accurate for the purposes of the valuation.
- Fund accounts for the 3 years to 31 March 2010

2.1.2 A summary of the data is set out in Appendix 2.

### 2.2 Assets

2.2.1 The asset allocation of the Fund as at 31 March 2010 was as follows:

Assets at This Valuation	31 March 2010	
	£(000)	%
UK Equities	238,961	17%
Overseas Equities	296,804	22%
Corporate Bonds	63,397	5%
Cash	31,028	2%
UK Gilts	59,547	4%
Overseas Bonds	-	-
Property	116,995	9%
Other assets	-	-
Alternative assets	569,061	41%
<b>Total</b>	<b>1,375,793</b>	<b>100%</b>

2.2.2 We estimate that the annual return on the assets in market value terms for the 3 years to 31 March 2010 was approximately 1.3% per annum.

### 2.3 Benefits

2.3.1 Since the previous valuation changes to the benefits have been introduced with effect from 1 April 2008.

2.3.2 The benefits being valued including these changes are as set out in the Regulations governing the Local Government Pension Scheme ("the LGPS") and are summarised in Appendix 6.

## 3 Actuarial Methods and Assumptions

### 3.1 Valuation Method

- 3.1.1 For the purposes of this valuation we have, as in the past, adopted an approach which separately considers the benefits in respect of service completed before the valuation date ("past service") and benefits in respect of service expected to be completed after the valuation date ("future service"). This approach enables us to focus on:-
- 3.1.2 The past service funding level of the Fund. This is the ratio of accumulated assets to liabilities in respect of past service after making allowance for future increases to members' pay and pensions in payment. A funding level in excess of 100% indicates a surplus of assets over liabilities; a funding level of less than 100% indicates a deficit.
- 3.1.3 The future service funding rate i.e. the level of contributions required from the employing bodies to support the cost of benefits building up in future.
- 3.1.4 There are various "funding methods" that can be used to determine the cost of providing benefits. The method we have adopted for employers open to new staff at this valuation is known as the "Projected Unit Method". The key feature of this method is that in assessing the future service cost we calculate the contribution rate which meets the cost of one year of benefit accrual.
- 3.1.5 For employers that are closed to new staff we have used the Attained Age Method. The key feature of this method is that we assess the average contribution required to fund the benefits earned until retirement.
- 3.1.6 This is the same approach as adopted at the previous valuation.

### 3.2 Valuation Assumptions

- 3.2.1 The next step is to formulate assumptions about the factors affecting the Fund's future finances such as inflation, pay increases, investment returns, rates of mortality, early retirement and staff turnover etc.
- 3.2.2 Future levels of pay increases will determine the level of benefits to be paid in future in respect of active members as well as the contributions that will be received by the Fund. Once in payment, pension benefits in excess of Guaranteed Minimum Pensions ("GMPs") are linked to the Retail Prices Index through increases granted in line with the Pensions (Increase) Act 1971. Pension benefits will in future be linked to the CPI rather than RPI.
- 3.2.3 The cost of providing for benefits, however, depends not only upon the amount but also the incidence of benefits paid i.e. at what point in the future benefits begin to be paid and, for pension benefits, for how long they continue to be paid.

3.2.4 As money is being set aside now to provide for benefits payable in the future i.e. the benefits are being prefunded, then part of the cost of providing the benefits can be met from investment returns achieved by the Fund's assets. These assets build up from contributions paid by scheme members and participating employers to the Fund.

3.2.5 The assumptions adopted at the valuation can therefore be considered as:-

- The statistical assumptions which generally provide estimates of the likelihood of benefits and contributions being paid, and,
- The financial assumptions which determine the estimates of the amount of benefits and contributions payable as well as their current or present value.

3.2.6 We examine the assumptions in more detail in the next two sections of our report.

### 3.3 Funding Model

3.3.1 At this valuation we have used a market related funding model. The key features of the model are as follows:

3.3.2 Assumed future levels of retail price inflation are derived by considering the difference between index-linked gilt and fixed-interest gilt yields at the valuation date, as published by the Bank of England. At this valuation we have also included an adjustment known as an inflation premium. This inflation premium is deducted from the market implied inflation assumption to reflect the expectation that market implied inflation tends to overstate actual retail price inflation.

3.3.3 Pay increases are assumed to exceed future retail price inflation based on past experience and expectations of future experience.

3.3.4 Pension increases are assumed to be in line with CPI rather than RPI. It is assumed that CPI will be 0.5% per annum less than RPI, consistent with the historical average.

3.3.5 The expected future return from equities is based on dividend yields at the valuation date in addition to an allowance for real capital growth in asset values.

3.3.6 Rather than take "spot" yields and market values of assets at the valuation date we have used smoothed yields and asset values spanning the 6 month period around the valuation date.

3.3.7 The discount rate used to discount future payments to and from the Fund and so determine the value placed on the liabilities reflects the risk adjusted expected return that will be earned by the actual investment strategy adopted by the Fund.

3.3.8 Under TAS R a "funding model" is referred to as a "measure".

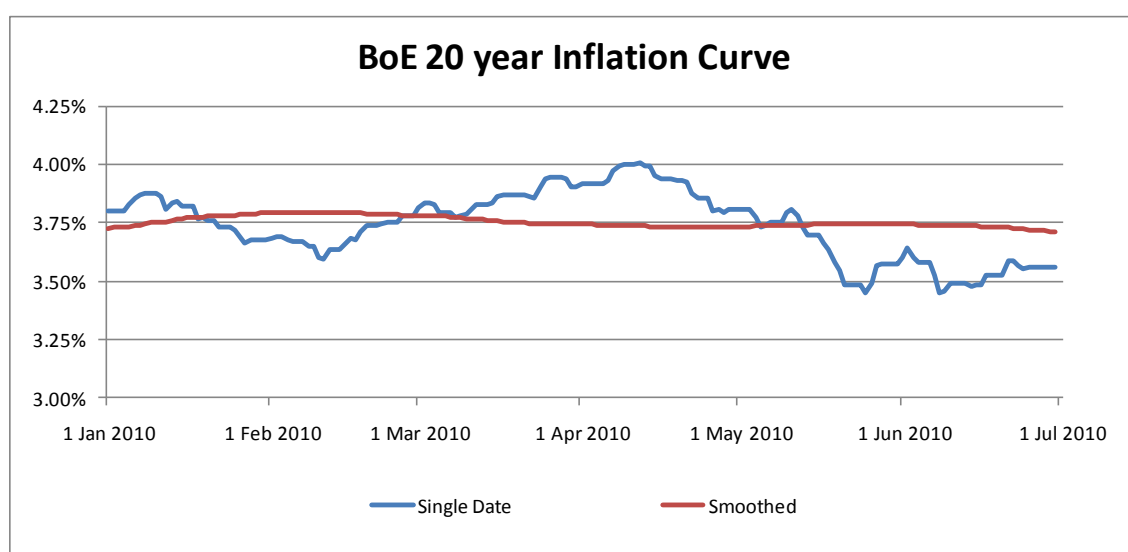
## 4 Financial Assumptions and Experience

4.1.1 The derivation of the key financial assumptions adopted at this valuation and how they compared as at the previous valuation are set out below. Further details are set out in Appendix 3.

### 4.2 Future Retail Price Inflation

4.2.1 The base assumption is the future level of retail price inflation. This is derived by considering the difference in yields from conventional and index linked gilts using the Bank of England Inflation Curve and then adjusting by an inflation premium.

4.2.2 The following chart plots the Inflation Curve over the 6 month period spanning the valuation date.



4.2.3 As at the valuation date the spot inflation projection was 3.90% and the average or smoothed level over the 6 months spanning the valuation date was 3.75%. We have used the smoothed level but then reduced by a 0.25% inflation premium adjustment to end up with an RPI assumption of 3.5% per annum.

### 4.3 Future Pension Increases

4.3.1 Previously, pension increases were assumed to be in line with retail price increases. The 2010 Emergency Budget announced that in future, the pension increase orders will be linked to the CPI rather than RPI. We have therefore assumed that pension increases will be 0.5% less than the price inflation assumption. i.e. 3.0% per annum.

### 4.4 Future Pay Inflation

4.4.1 As benefits are currently linked to pay levels at retirement, an assumption has to be made about future levels of pay inflation. Historically there has been a close link between price and pay inflation



with pay increases in excess of price inflation averaging out at between 1% and 3% per annum depending on economic conditions.

- 4.4.2 The assumption adopted at the previous valuation was that pay increases, over and above increases due to promotion and other increments (or “salary scales”), would exceed price inflation by 1.5% per annum in the longer term. We have adopted the same long term assumption at this valuation.
- 4.4.3 However, in anticipation of Government policy we have completed calculations assuming a short term “pay freeze” for 2 years for those earning over £21,000 per annum.
- 4.4.4 At this valuation we have adopted the same salary scales as adopted at the previous valuation.

## **4.5 Future Investment Returns/Discount Rate**

- 4.5.1 To determine the value of accrued liabilities and future contribution requirements at any given point in time it is necessary to discount future payments to and from the Fund. There are a number of different approaches which can be adopted in deriving the discount rate to be used. FRS 17 for example requires that the discount rate is related only to yields from corporate bonds.
- 4.5.2 In our view the discount rate adopted should depend on the purpose of the valuation and the overall funding objectives. The regulations require the actuary to adopt methods and assumptions which produce stable levels of employer contributions. In our view therefore, to help achieve this objective, the discount rate should reflect the expected investment return to be achieved from the underlying investment strategy.
- 4.5.3 In determining the assumption to be made in relation to future investment returns it is necessary to consider the investment strategy of the Fund and the resulting expected future return earned by the assets held.
- 4.5.4 The investment strategy of the Fund is to invest the assets in a mix of equities, bonds and alternative assets.
- 4.5.5 Redemption yields from gilts give an indication of the future rates of return from these asset classes. Redemption yields from corporate bonds are also readily available. There is however no comparable market indicator to derive the market expected future return from investing in equities, property or other alternative assets.
- 4.5.6 It is however possible to model future returns from equities by considering current dividend yields and making an assumptions regarding future growth in capital values.
- 4.5.7 The following table sets out the derivation of the expected return from equities at the valuation date.

Smoothed Equity Returns	March 2010 % p.a.
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Net equity yield	3.3%
Inflation	3.5%
plus assumed real capital return	0.8%
Equity Return	7.5%

- 4.5.8 It would also be possible to derive the expected future return from other asset classes such as property and alternative asset classes. Intuitively we might expect that returns from asset classes other than equities and gilts might be expected to return somewhere between gilts and equities.
- 4.5.9 Accordingly we have assumed that the return from other alternative asset classes is the same as the expected return from equities.
- 4.5.10 We then derive the discount rate as firstly, the weighted average of future expected returns from the various asset classes based on the actual asset allocation as at the valuation date.
- 4.5.11 We then include a risk adjustment to the discount rate to reflect the amount of equity risk being taken relative to gilts. For a Fund with 75% or less exposure to equity type investments the risk adjustment is nil. For a Fund with more than 75% in equity type investments the reduction in discount rate is 50% of the extra return expected from the actual strategy compared to one invested 75% in equity type investments.
- 4.5.12 Finally to accommodate any extreme market conditions at the valuation date the resulting real discount rate is constrained to 4% per annum.
- 4.5.13 In summary therefore we have adopted the following assumptions.

Financial Assumptions	March 2010		March 2007	
	% p.a.	Real % p.a.	% p.a.	Real % p.a.
Investment Return				
Equities/absolute return funds	7.5%	4.0%	7.6%	4.3%
Gilts	4.5%	1.0%	4.7%	1.4%
Bonds & Property	5.6%	2.1%	5.4%	2.1%
Discount Rate	7.1%	3.6%	6.8%	3.5%
Risk Adjusted Discount Rate	6.8%	3.3%		
Pay Increases	5.0%	1.5%	4.8%	1.5%
Price Inflation	3.5%		3.3%	
Pension Increases	3.0%	(0.5%)	3.3%	

- 4.5.14 Note that the pay increase assumption is zero for 2 years for those earning over £21,000.
- 4.5.15 The key assumption in determining the valuation of the liabilities is the real discount rate. As we see the real discount rate is broadly similar to the 2007 assumption.

## 4.6 Intervaluation Experience - Financial

4.6.1 The following table sets out the financial experience of the Fund during the intervaluation period compared to the assumptions adopted at the previous valuation.

Financial Experience	Actual % p.a.	Assumed % p.a.	Difference % p.a.
Investment Return	1.3%	6.8%	(5.5%)
Estimated Pay Increases	4.8%	4.8%	(0.0%)
Price Inflation/Pension Increases	2.9%	3.3%	(0.4%)

4.6.2 The principal conclusions are:

- Investment returns were significantly less than assumed.
- Pay increases were as expected.
- Pension increases were slightly less than expected.

4.6.3 Overall the financial experience of the Fund during the intervaluation period compared to the assumptions adopted at the previous valuation was a negative factor.

## 5 Demographic Experience and Assumptions

### 5.1 Statistical Experience – Active Members

- 5.1.1 The following table sets out the actual number of membership movements amongst active members during the intervalation period compared to the assumptions adopted at the previous valuation.

Active Membership Movements	Actual	Assumed	Difference %
<b>Early Leavers</b>	7,205	5,622	28%
<b>Deaths in Service</b>	61	79	(23%)
<b>Retirements</b>			
Ill health	62	113	(45%)
Age	936		
Voluntary	42		
Redundancy	313		
Efficiency	31		
<b>Total</b>	<b>1,384</b>		

- 5.1.2 There were more early leavers than expected and fewer ill-health retirements than expected.
- 5.1.3 Overall the demographic experience of the Fund during the intervalation period compared to the assumptions adopted at the previous valuation was a positive factor during the intervalation period.
- 5.1.4 We have adjusted our pre retirement assumptions to better reflect recent actual experience.

### 5.2 Pensioner Mortality

- 5.2.1 Mortality investigations over the last few years have concluded that the population across the UK is living longer and that this improvement will continue at a faster rate than seen in the past. Our analysis of LGPS pensioner longevity over the course of the last 20 years or so confirms that pensioners are living longer although experience does vary across the country and from Fund to Fund.

- 5.2.2 The following table sets out the actual and expected mortality of pensioners during the intervaluation period.

<b>Pensioner Deaths</b>	<b>Pensioners</b>	<b>Dependants</b>	<b>Total</b>
<b>By Number</b>			
Actual	634	273	<b>907</b>
Assumed	370	111	<b>482</b>
<b>% Difference</b>	71%	146%	<b>88%</b>
<b>By Amount of Pension</b>	<b>£(000)</b>	<b>£(000)</b>	<b>£(000)</b>
Actual	2,796	687	<b>3,483</b>
Assumed	1,978	328	<b>2,306</b>
<b>% Difference</b>	41%	109%	<b>51%</b>

- 5.2.3 The number of pensioners dying during the intervaluation period was higher than expected.
- 5.2.4 Overall the mortality experience over the intervaluation period had a positive impact on the financial position of the Fund in that the amount of pension ceasing was more than expected.
- 5.2.5 We have reviewed the mortality assumptions adopted at this valuation which bring the assumptions closer to recent experience but also allow for improvements in mortality over the next 20 years.

## 5.3 Retirement Ages – Active Members

- 5.3.1 At the previous valuation it was assumed that active members will retire as soon as they are able to on unreduced benefits without requiring employer consent – typically satisfying the Rule of 85 but no earlier than age 60 or later than age 65.
- 5.3.2 Experience suggests that whilst the Rule of 85 is an influencing factor on when active members choose to retire, State Pension Age is also a major factor for many active members as they need the additional income payable from the State before they can afford to retire.
- 5.3.3 There are existing plans in place to increase State Pension Age, albeit very slowly. The new Government have, however, indicated that State Pension Age will be 66 from 2020.
- 5.3.4 It is difficult to assess what the impact will be but we have completed calculations assuming that active members will retire 1 year later than the date they would be entitled to retire and receive unreduced benefits.

## 6 Valuation Results

### 6.1 Past Service Funding Position and Contribution Rates

6.1.1 The following table sets out the valuation results for the Fund. We show

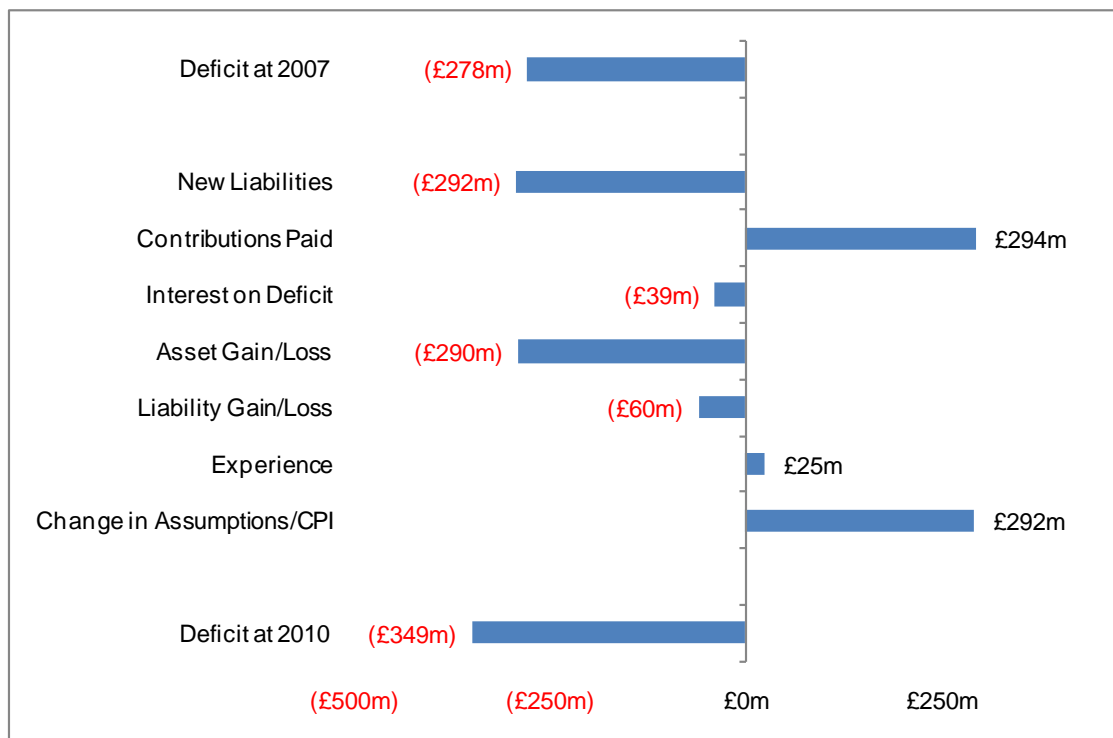
- The past service funding position
- The required average ongoing employer contribution rate for future service benefits
- The required total employer contribution rate to restore the funding position to 100% over the agreed 20 year period following the valuation date.

31 March 2010	
Past Service Funding Position	£(000)
<b>Smoothed Asset Value</b>	1,321,679
<b>Past Service Liabilities</b>	
Active Members	709,508
Deferred Pensioners	249,670
Pensioners	711,636
<b>Value of Scheme Liabilities</b>	1,670,814
<b>Surplus (Deficit)</b>	(349,135)
<b>Funding Level</b>	79%
Employer Contribution Rates	% of Payroll
Future Service Contribution Rate	13.7%
Deficit recovery (20 years)	5.3%
<b>Total Contribution Rate</b>	<b>19.0%</b>

6.1.2 As we see, the funding level was 79% and the average required employer contribution to restore the funding position to 100% over the next 20 years is 19.0% of pensionable pay.

## 6.2 Reconciliation of Past Service Position

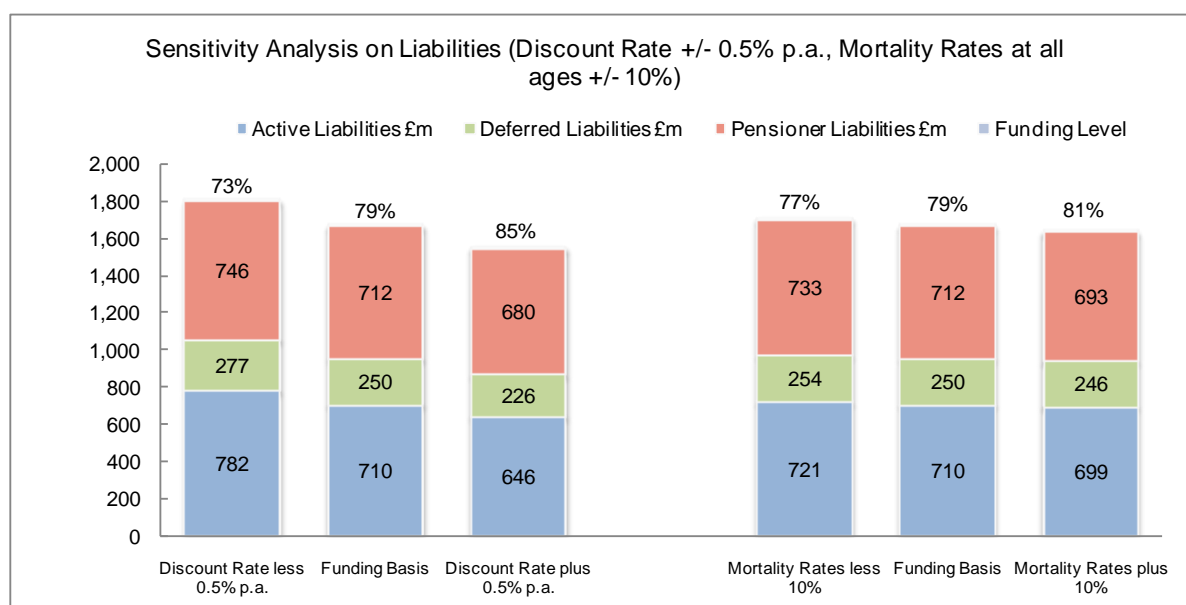
6.2.1 A reconciliation of the intervaluation experience on the past service position in the 3 years to the valuation date is set out in the following chart.



6.2.2 As we can see, overall the deficit increased during the intervaluation period.

## 6.3 Sensitivity Analysis

- 6.3.1 It is important that it is understood that the valuation results for the Fund are based on the assumptions used to determine the liabilities. Changes to the adopted assumptions will affect the funding position of the Fund.
- 6.3.2 In order to illustrate this, a number of calculations have been carried out to highlight the sensitivity of the funding position to the assumptions adopted, focusing on the assumptions to which the funding position is most sensitive.
- 6.3.3 To highlight the sensitivity of the funding position to changes in the discount rate, we have considered the impact of changing this assumption by 0.5% p.a. in either direction. We have also considered the impact of mortality rates at all ages being either 10% higher or lower than assumed. The result of this analysis is shown in the chart below:





## 7 Comments and Conclusions

### 7.1 Financial Position

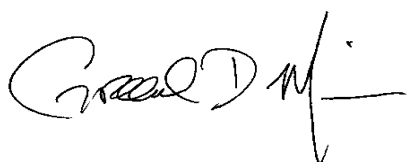
- 7.1.1 The funding level has shown a slight decline since the 2007 valuation.
- 7.1.2 Whilst investment returns were less than assumed this was slightly offset by the CPI changes and other assumption changes.

### 7.2 Employer Contribution Rates

- 7.2.1 The contribution rates that we have certified have been set to fund each employer's share of the deficiency in the Fund over the next 20 years.
- 7.2.2 The certified contribution rates for each employer are set out in our certificate in Appendix 5.

### 7.3 New Employers joining the Fund

- 7.3.1 We would recommend that any new small employers or admitted bodies joining the Fund with no previous interest in the Fund should be referred to us for individual calculation as to the required level of contribution.
- 7.3.2 Any employer who ceases to participate in the Fund should be referred to us in accordance with Regulation 38.
- 7.3.3 We would be pleased to answer any questions arising from this report.



**Graeme D Muir FFA**



**Alison Hamilton FFA**

## **Appendix 1. Valuation Method**

### **Valuation of Liabilities**

Using our assumptions we estimate the payments which will be made from the Fund throughout the future lifetime of existing active members, deferred benefit members, pensioners and their dependants. We then calculate the amount of money which, if invested now would be sufficient together with the income and growth in the accumulating assets to make these payments in future, using our assumption about investment returns.

This amount is called “the present value” (or, more simply, “the value”) of members benefits. Separate calculations are made in respect of benefits arising in relation to service before the valuation date (“past service”) and for service after the valuation date (“future service”).

### **Past Service Funding Level**

A comparison is made of the value of the existing assets with the value of benefits in relation to past service (allowing for future pay and pension increases). If there is an excess of assets over past service liabilities then there is a past service surplus. If the converse applies there is a past service deficiency.

### **Future Service Funding Rate**

The first stage is to calculate the value of benefits accruing to existing active members in the future, by reference to projected pay as at the date of retirement or earlier exit.

For employers that are still open to new staff we have used the Projected Unit Method which considers the benefits accruing in the year following the valuation date. The value of benefits accruing in the year following the valuation date is then expressed as a percentage of payroll over the same period having first deducted the equivalent contribution paid by the active members.

The method described above results in a stable, long term contribution rate over time, if the assumptions adopted are borne out in practice and there is a steady flow of new entrants to the Fund. If the admission of new entrants is such that the average age of the membership profile increases then the contribution rate calculated at future valuations would be expected to increase.

For employers that are closed to new staff we have used the Attained Age Method. The key feature of this method is that we assess the average contribution required to fund the benefits earned until retirement.

### **Valuation of Assets**

Assets have been valued at a 6 month smoothed market value straddling the valuation date.

## Appendix 2. Valuation Data

A summary of the membership records submitted for the valuation is as follows.

Active Members			Actual Pensionable Pay		Average	
	Number		£ (000)		£	
Full Time	2010	2007	2010	2007	2010	2007
Males	3,883	3,794	116,540	105,757	30,013	27,875
Females	5,604	5,513	152,482	134,602	27,209	24,415
Part Time						
Males	868	662	10,786	7,157	12,426	10,811
Females	10,090	8,653	106,892	82,510	10,594	9,535
<b>Total</b>	<b>20,445</b>	<b>18,622</b>	<b>386,700</b>	<b>330,027</b>	<b>18,914</b>	<b>17,722</b>

Pensioners			Annual Pensions		Average	
	Number		£ (000)		£	
	2010	2007	2010	2007	2010	2007
Males	4,037	3,543	28,418	24,037	7,039	6,784
Females	6,509	5,119	20,233	15,488	3,108	3,026
Dependants	1,681	1,531	4,223	3,854	2,512	2,517
<b>Total</b>	<b>12,227</b>	<b>10,193</b>	<b>52,874</b>	<b>43,379</b>	<b>4,324</b>	<b>4,256</b>

Deferred Pensioners (incl "undecideds")			Annual Pensions		Average	
	Number		£ (000)		£	
	2010	2007	2010	2007	2010	2007
Males	4,098	3,454	7,757	6,975	1,893	2,020
Females	14,077	10,604	14,041	10,668	997	1,006
<b>Total</b>	<b>18,175</b>	<b>14,058</b>	<b>21,798</b>	<b>17,643</b>	<b>1,199</b>	<b>1,255</b>

### Notes

- The numbers relate to the number of records and so will include members in receipt of or potentially in receipt of more than one benefit.
- Annual pensions are funded items only and include pension increases up to and including the 2010 PI Order.
- Pensionable pay is actual earnings.

A summary of the assets held by the Fund at the valuation date is as shown below.

Assets at This Valuation	31 March 2010	
	£(000)	%
UK Equities	238,961	17%
Overseas Equities	296,804	22%
Corporate Bonds	63,397	5%
Cash	31,028	2%
UK Gilts	59,547	4%
Overseas Bonds	-	-
Property	116,995	9%
Other assets	-	-
Alternative assets	569,061	41%
<b>Total</b>	<b>1,375,793</b>	<b>100%</b>

Revenue Accounts		Year to	March 2010	March 2009	March 2008	TOTAL
			£ (000)	£ (000)	£ (000)	£ (000)
EXPENDITURE	Retirement Pensions		51,852	47,433	43,551	142,836
	Retirement Lump Sum		16,242	15,509	10,309	42,060
	Death Benefits		2,068	1,486	1,133	4,687
	Leavers benefits		9,993	5,333	9,863	25,189
	Expenses		1,433	1,487	1,438	4,358
	Other Expenditure		-	-	-	-
TOTAL			81,588	71,248	66,294	219,130
INCOME	Employees Ctbn		27,666	25,058	22,093	74,817
	Employers Ctbn		79,678	70,273	68,968	218,919
	Transfer Values		13,619	9,323	12,303	35,245
	Investment Income		22,882	22,467	20,672	66,021
	Other Income		75	108	152	335
TOTAL			143,920	127,229	124,188	395,337
Fund Value			£ (000)	£ (000)	£ (000)	£ (000)
Assets at Start of Year			1,007,413	1,207,157	1,205,218	1,205,218
Cashflow			62,332	55,981	57,894	176,207
Change in value			306,049	(255,725)	(55,955)	(5,631)
Assets at End of Year			1,375,794	1,007,413	1,207,157	1,375,794
Annual Returns						
Approx Rate of Return pa			32.1%	-19.0%	-2.9%	1.3%

## Appendix 3. Actuarial Assumptions

The valuation process is essentially a projection of future cashflows into and out of the Fund. The amount of future cashflows out of the Fund i.e. benefits provided will depend on rates of future pay increases and price inflation. The timing or incidence of the cashflows will depend upon future rates of retirement, mortality etc.

As money is being set aside now to provide for benefits payable in the future then part of the cost of providing the benefits can be met from investment returns achieved by the Fund's assets which then build up. The higher the rate of return achieved by the assets the lower the contribution requirement that has to be paid in future to meet the cost of the benefits.

### Financial Assumptions

The principal financial assumptions adopted in the valuation are therefore as follows:-

#### Price Inflation

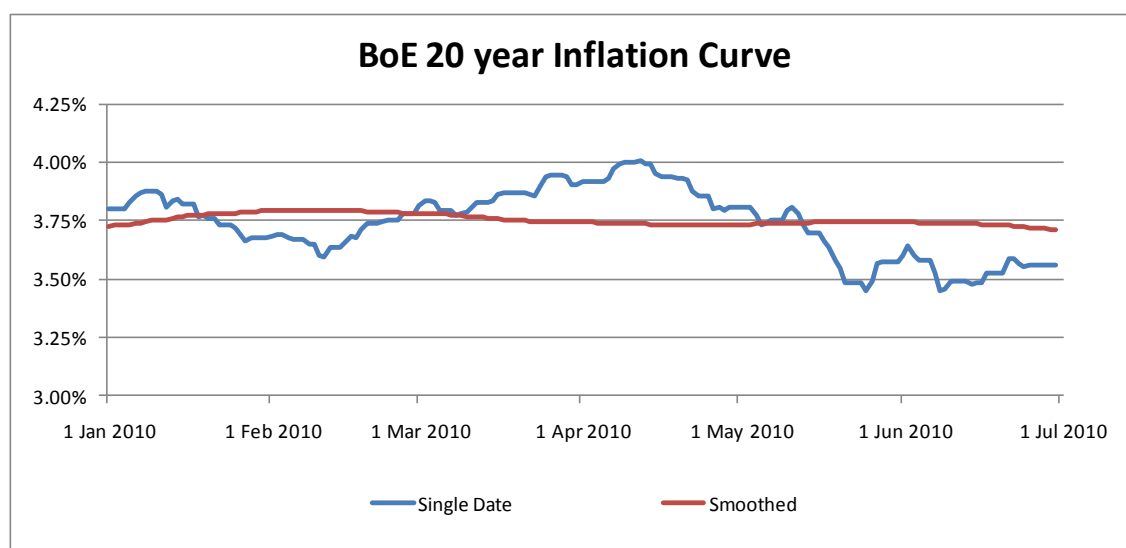
There are number of ways to try to estimate what future levels of inflation might be.

One approach would be to look at the long term trend in the past although much depends on the measurement period.

In these days of "marked to market" valuations, the usual approach is to look at the difference between yields from fixed-interest and index-linked gilts.

At this valuation we have looked at 20 year Bank of England Inflation curve which is the level of future RPI over the next 20 years as implied by the gilt market.

The following chart shows this on a daily basis during the 6 month period straddling the valuation date. We have also shown the smoothed or rolling average observation over that period.

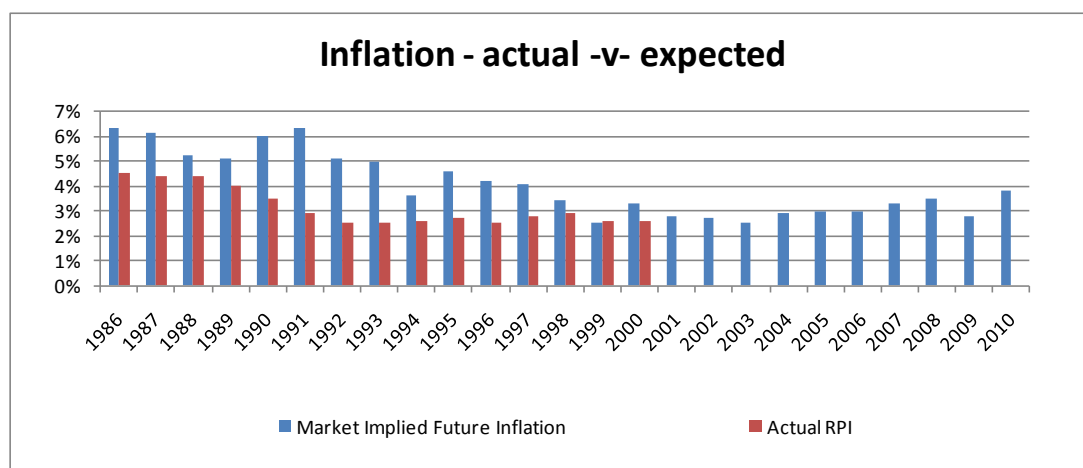


However, one of the issues in adopting such an approach is the arguably imperfect nature of the gilt market. The supplier of gilts (the Government) is a reluctant supplier, especially for long-dated gilts (which are the ones which are most useful for estimating future inflation for pension schemes).

On the demand side, there are certain institutions (insurance companies for example) who are essentially “forced holders” of gilts to meet various solvency requirements. Accordingly, the pricing of gilts is not perfect.

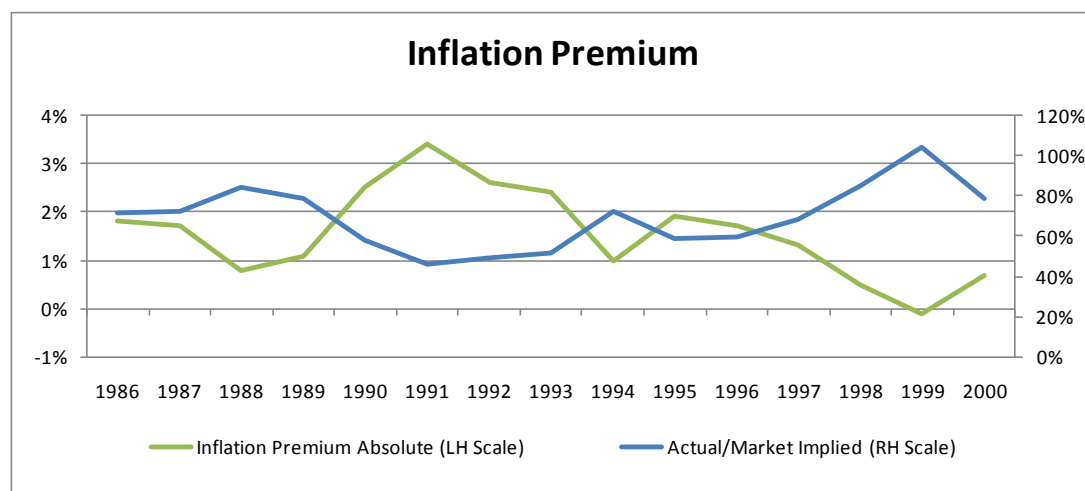
There is also the issue of what is known as the “inflation premium”. The argument is that investors will pay a premium for inflation protection and so arguably index-linked gilts are “more expensive” than fixed-interest gilts or equivalently index-linked gilt yields are lower than they might otherwise be.

The following chart shows how the gilt market implied 10 year inflation level at the beginning of each year has compared with the resulting 10 year actual level of inflation.



As we see the market implied level of inflation has consistently over-estimated the actual level of inflation.

The following chart shows the inflation premium both at an absolute level – the difference between actual and expected inflation and in relative terms (actual/expected).



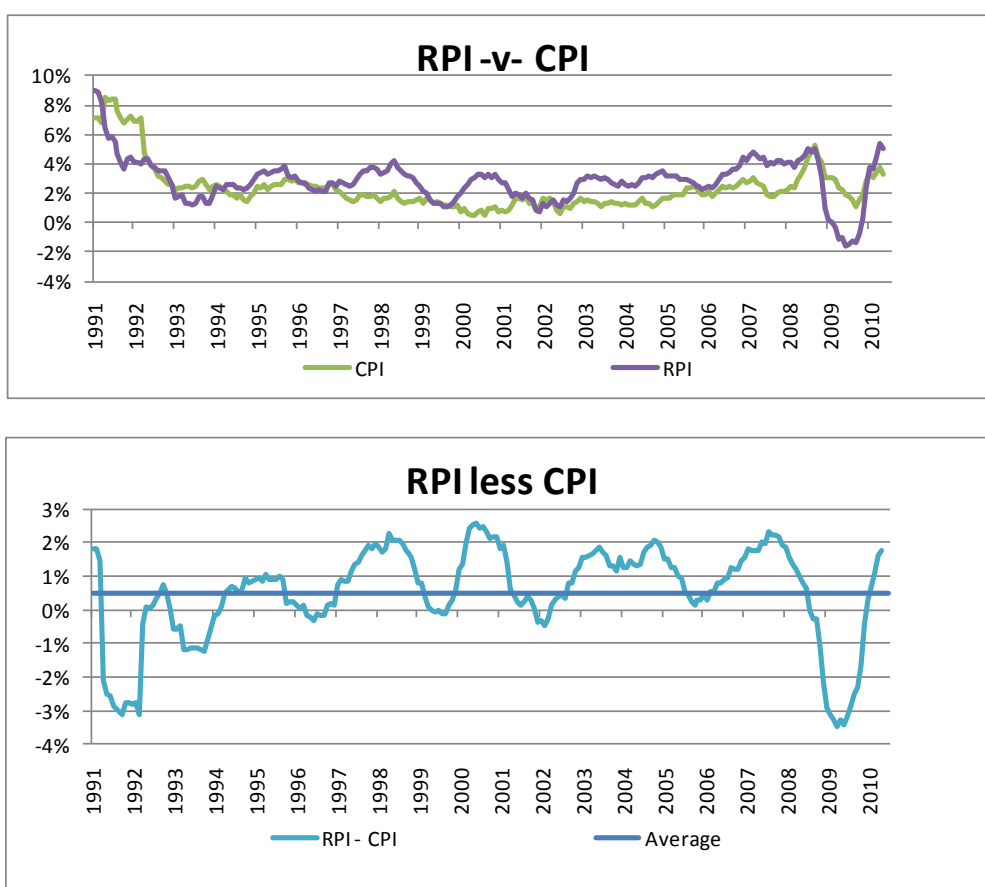
## Pension Increases

The Retail Price Index has long been the established measure of inflation in the UK. It measures the change in prices of a number of things including housing costs such as mortgage interest payments.

However in the 1990's the Government introduced the Consumer Price Index which is based on the prices of a range of consumer goods – similar to the RPI but it specifically excludes housing costs. The CPI is now the favoured measure the Government uses for measuring inflation in the economy.

The 2010 Emergency Budget delivered by George Osborne announced that in future, the pension increase orders will be linked to the CPI rather than RPI. This was expected to save some pennies implying that the Government expects CPI to be below RPI.

The following chart show how the 2 have compared since 1990.



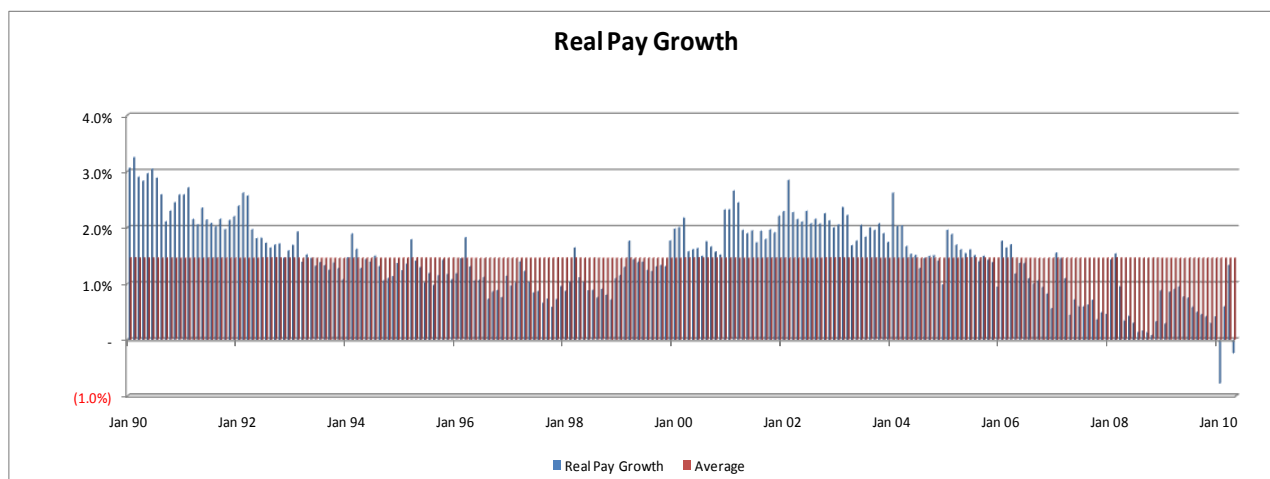
As we see RPI has indeed generally been higher the CPI and the average “gap” over the last 20 years has been around 0.5% per annum.

Thus, if this past trend continues then we would expect future pension increases to be 0.5% less than previously projected.

## Pay Increases

Having determined our assumption about future levels of price inflation, the next stage is to assess future levels of pay increases relative to price inflation.

Historically there is, not surprisingly, a strong correlation between pay and price inflation as we see in the following charts.



The trend has been that real pay increases have been around 1% to 3% per annum although as overall levels of inflation have reduced so too has the level of real pay growth. The long term average is 1.5% more than RPI although there is evidence of a declining trend.

At this valuation we have assumed that future long term salary growth will be 1.5% more than RPI.

## Investment Returns

In a market-related valuation it is necessary to assess future average levels of return in current market conditions.

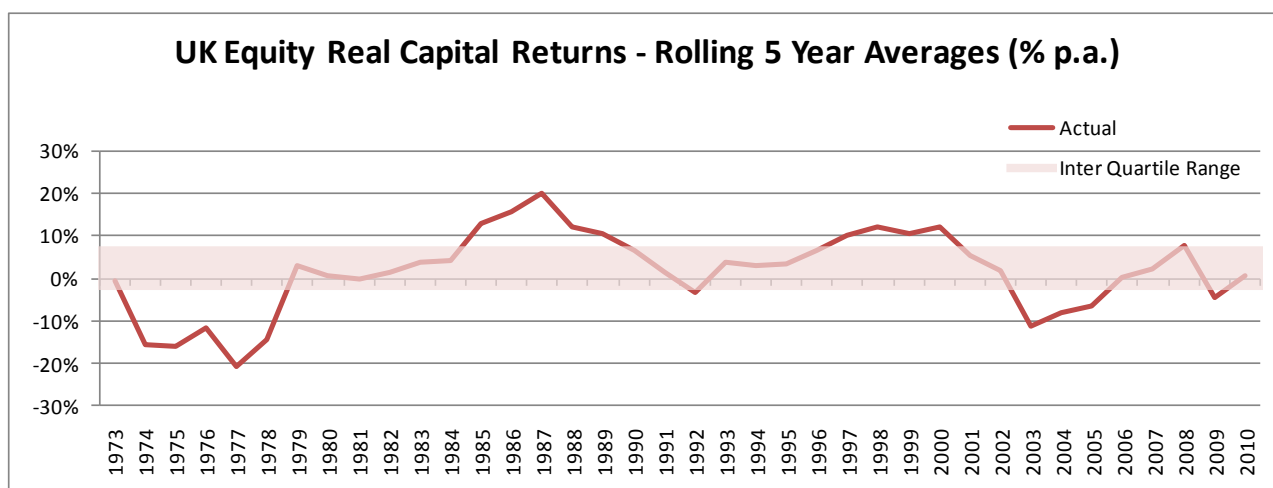
Redemption yields from gilts give an indication of the market's expectations of long term interest rates and so some indication about future risk free rates of return. There is however no comparable market indicator to derive the market's expected future return from investing in equities at any particular point in time.

We have assumed that the real return to be earned in future from equities from current market levels will be the current net dividend yield plus future real growth in share values.

The next chart shows the long term capital return from UK equities in real terms over the last 35 years or so together with the "inter quartile range" – the range of observations that account for 50% of all observations around the median.

As we see the actual returns here averaged out at around 2% per annum although there have been prolonged periods when the real capital returns have been significantly different to this average.





For the purposes of the valuation therefore we have assumed that real capital returns will be 0.8% per annum.

The derivation of the equity return is therefore as follows:-

Smoothed Equity Returns		March 2010
		% p.a.
	Net equity yield	3.3%
	Inflation	3.5%
	plus assumed real capital return	0.8%
	Equity Return	7.5%

It would also be possible to derive the expected future return from other asset classes such as property and alternative asset classes. Intuitively we might expect that returns from asset classes other than equities and gilts might be expected to return somewhere between gilts and equities – what we usually see from corporate bonds.

Accordingly we have assumed that the return from other alternative asset classes is the same as the expected return from equities.

We then derive the discount rate as the weighted average of future expected returns from the various asset classes based on the actual investment strategy.

We then include a risk adjustment to the discount rate to reflect the amount of equity risk being taken relative to gilts. For a Fund with 75% or less exposure to equity type investments the risk adjustment is nil. For a Fund with 100% in equity type investments the reduction in discount rate is 50% of the extra return expected from a Fund invested 100% in equity type investments compared to one invested 75% in equity type investments.

Finally to accommodate any extreme market conditions at the valuation date the resulting real discount rate is constrained to 4%.

In summary therefore we have adopted the following assumptions.

Financial Assumptions	March 2010		March 2007	
	% p.a.	Real % p.a.	% p.a.	Real % p.a.
Investment Return				
Equities/absolute return funds	7.5%	4.0%	7.6%	4.3%
Gilts	4.5%	1.0%	4.7%	1.4%
Bonds & Property	5.6%	2.1%	5.4%	2.1%
Discount Rate	7.1%	3.6%	6.8%	3.5%
Risk Adjusted Discount Rate	6.8%	3.3%		
Pay Increases	5.0%	1.5%	4.8%	1.5%
Price Inflation	3.5%	-	3.3%	
Pension Increases	3.0%	(0.5%)	3.3%	

## Statistical Assumptions

The statistical assumptions we have adopted are based on our analysis of the incidence of retirement and withdrawal of our Local Authority client funds.

Sample rates are shown in the following tables: -

Age	Incidence per 1000 active members per annum								Salary Scales			
	Males				Females				Males	Femal	Males	Femal
	Death	Ill Health	Wdls	Death	Ill Health	Wdls						
	FT	PT	FT	PT	FT	PT						
20	0.5	0.0	0.0	500.0	0.2	0.1	0.1	500.0	100.0	100	100.0	100
25	0.4	0.1	0.1	450.0	0.2	0.1	0.1	450.0	122.8	100	114.2	100
30	0.3	0.1	0.1	330.0	0.3	0.2	0.2	330.0	145.5	100	125.8	100
35	0.5	0.2	0.2	230.0	0.5	0.4	0.4	230.0	166.3	100	133.6	100
40	0.9	0.4	0.4	135.0	0.6	0.6	0.6	135.0	183.1	100	136.6	100
45	1.3	0.7	0.7	60.0	0.8	0.9	0.9	60.0	194.4	100	136.6	100
50	2.5	1.2	1.2	-	1.4	1.6	1.6	-	198.8	100	136.6	100
55	4.3	2.6	2.6	-	2.2	3.2	3.2	-	198.8	100	136.6	100
60	6.9	5.5	5.5	-	3.1	6.4	6.4	-	198.8	100	136.6	100
64	11.1	9.9	9.9	-	4.0	8.6	8.6	-	198.8	100	136.6	100

### Other assumptions

Age Retirements	It is assumed that active members will retire one year after age 60 or when they would first satisfy the rule of 85 if later, no later than 65.
Mortality	90% S1PA Heavy tables allowing for medium cohort projection, with a minimum 1% improvement for future life expectancies.
Probability of partners pension coming into payment (including a loading for dependants benefits)	90%
Partner Age Difference	Males are assumed to be 3 years older than their partners
Commutation	It is assumed that at retirement 50% of members will opt to increase their lump sum to the maximum allowed.
Ill health tiers	It is assumed that 50% of ill health retirements will be eligible for benefits based on full prospective service and 50% will qualify for a service enhancement of 25% of prospective service.

## Appendix 4. Individual Employer Data as at 31 March 2010

Employer	Code	Active Members			Pensioners			Deferred Pensioners		
		Number	Actual Pay	Average	Number	Annual Pensions	Average	Number	Annual Pensions	Average
			£ (000)	£		£ (000)	£		£ (000)	£
Buckinghamshire C.C	1	8,187	125,329	15,308	5,553	21,920	3,947	7,998	7,611	952
Southwood Middle School	5	13	120	9,243	4	13	3,175	7	4	552
Shenley Brook End School	6	96	1,111	11,576	6	4	614	83	40	481
Portfields Combined School	7	10	95	9,476	1	5	4,848	9	6	666
Loughton School	8	22	207	9,419	-	-	-	8	4	469
Glastonbury Thorn First School	9	13	110	8,457	-	-	-	5	3	567
Germander Park School	10	6	41	6,817	1	2	2,251	10	7	674
West Bletchley Council	11	6	156	25,956	-	-	-	3	3	1,091
Bletchley/Fenny Stratford T.C.	12	9	145	16,076	-	-	-	1	0	259
St Paul's R C School	13	109	1,507	13,830	8	22	2,783	51	21	413
Ousedale School	14	102	1,199	11,758	13	36	2,737	28	14	491
Sir Frank Markham School	15	1	7	6,582	17	51	2,991	66	32	486
New Bradwell Combined School	16	20	231	11,567	3	9	3,023	7	2	234
Superclean (Cressex School)	17	-	-	-	-	-	-	1	0	427
Aylesbury Vale Dial-A-Ride	18	4	62	15,528	-	-	-	1	2	2,300
A.D.P	19	-	-	-	2	10	5,241	5	33	6,641
Bucks MK Fire Authority	20	132	3,430	25,986	39	248	6,353	55	135	2,447
Buckingham Town Council	21	3	50	16,619	-	-	-	4	5	1,250
Bucks Association For Local Councils	22	1	14	13,761	-	-	-	-	-	-
Iver Parish Council	23	2	56	27,898	-	-	-	-	-	-
Stantonbury Campus	24	146	2,161	14,802	44	128	2,904	100	79	788
Beaconsfield High School	25	39	606	15,526	13	25	1,935	13	6	482
Brookmead School	26	8	92	11,500	5	10	2,083	1	2	1,921
Chalfonts Community College	27	79	1,184	14,981	12	24	2,037	38	21	560
Overstone Combined School	28	9	107	11,866	1	1	600	-	-	-
Milton Keynes College	29	340	6,055	17,810	88	181	2,054	368	287	780
South Bucks Carers	30	-	-	-	2	6	3,077	5	4	868
Aylesbury College	31	114	1,736	15,231	68	229	3,366	183	190	1,038

Employer	Code	Active Members			Pensioners			Deferred Pensioners		
		Number	Actual Pay	Average	Number	Annual Pensions	Average	Number	Annual Pensions	Average
			£ (000)	£		£ (000)	£		£ (000)	£
Bucks Probation	32	-	-	-	41	193	4,709	29	40	1,395
Bucks Mag Courts	33	-	-	-	48	226	4,703	29	43	1,493
Amersham and Wycombe College	34	134	3,180	23,732	101	303	3,000	158	176	1,114
Great Marlow School	35	42	712	16,954	5	6	1,154	29	27	935
Two Mile Ash School	36	3	61	20,216	5	11	2,226	8	13	1,584
Loudwater Combined School	37	10	57	5,735	5	8	1,623	2	1	371
Gerrards Cross CE School	38	16	114	7,106	2	2	1,191	6	3	487
Danesfield School	39	23	137	5,961	5	6	1,137	16	2	142
Thames Valley Police Authority	40	3,353	83,108	24,786	1,457	5,087	3,491	2,202	3,162	1,436
Denbigh School	41	51	776	15,210	8	25	3,070	39	22	568
Holmer Green Upper School	42	-	-	-	1	4	3,802	5	2	455
Wooburn And Bourne End P.C.	43	4	82	20,428	1	5	5,048	3	4	1,404
Newport Pagnell T.C.	44	10	182	18,215	4	8	2,103	18	11	619
Chiltern Leisure Trust	45	1	5	5,374	15	101	6,709	50	101	2,020
Heritage Care	46	53	800	15,096	54	140	2,597	41	49	1,192
Penn School	47	40	604	15,093	5	15	2,941	10	13	1,259
Stanton School	48	15	121	8,057	2	5	2,396	16	10	614
Serco	49	-	-	-	1	0	387	3	13	4,271
Milton Keynes Council	50	3,893	68,056	17,482	982	4,832	4,920	3,262	3,520	1,079
Aylesbury Vale D.C.	51	545	14,772	27,104	614	3,556	5,792	454	911	2,007
South Bucks D.C	52	128	3,778	29,515	211	1,499	7,105	167	446	2,673
Chiltern D.C.	53	177	4,860	27,460	271	1,580	5,830	218	429	1,968
Milton Keynes Borough Council	54	-	-	-	373	1,977	5,300	219	302	1,378
Wycombe D.C.	55	474	13,609	28,711	708	4,025	5,685	635	1,547	2,437
Hamilton Primary School	56	8	115	14,362	5	6	1,190	6	2	344
Lord Grey School	57	66	1,120	16,974	13	26	1,988	31	19	611
The Radcliffe School	58	55	891	16,206	30	51	1,713	65	40	617
The Royal Grammar School	59	44	809	18,378	23	76	3,307	30	20	676
Anglian Water Authority Recharge	60	-	-	-	5	37	7,371	-	-	-
N.H.S.Recharge	62	-	-	-	10	26	2,580	-	-	-

Employer	Code	Active Members			Pensioners			Deferred Pensioners		
		Number	Actual Pay	Average	Number	Annual Pensions	Average	Number	Annual Pensions	Average
			£ (000)	£		£ (000)	£		£ (000)	£
Dep.Transport Recharge	63	-	-	-	6	13	2,218	-	-	-
Beechview Middle School	65	8	101	12,572	2	8	4,003	4	2	397
The Cottesloe School	66	12	181	15,044	9	35	3,900	12	11	891
Brushwood Middle School	67	2	30	14,871	5	13	2,671	3	1	302
Castlefield School	68	20	254	12,680	12	31	2,551	10	5	495
Waddesdon C E School	69	40	676	16,904	16	23	1,428	19	10	549
Amersham T.C.	71	8	212	26,479	14	55	3,941	8	16	1,941
Aston Clinton P.C.	72	1	18	17,715	1	4	3,525	-	-	-
Beaconsfield T.C.	73	-	-	-	1	11	10,547	1	4	3,769
Valuation Tribunal Service	74	1	43	42,510	5	29	5,877	-	-	-
Burnham P.C.	75	4	114	28,619	3	17	5,678	4	7	1,742
Chalfont St Giles P.C.	76	4	77	19,262	2	1	681	1	0	20
Chalfont St Peter P.C.	77	3	70	23,321	3	5	1,597	2	6	2,852
Chiltern Crematorium	78	12	216	18,017	17	35	2,039	8	8	1,025
Chesham T.C.	79	20	364	18,194	8	26	3,202	15	14	955
Denham P.C.	80	1	21	21,076	-	-	-	-	-	-
Gerrards Cross P.C.	81	1	29	29,489	1	1	990	-	-	-
Marlow T.C.	82	3	63	20,951	4	14	3,560	2	1	409
Olney T.C.	83	5	88	17,645	6	15	2,443	1	1	856
Chepping Wycombe P.C.	84	6	104	17,342	2	32	15,961	1	1	642
Race Equality Council	85	2	51	25,702	-	-	-	3	4	1,224
Lane End P.C.	86	1	14	13,964	2	8	4,105	1	1	516
Wendover P.C.	87	4	79	19,680	2	4	2,216	-	-	-
The Fremantle Trust	88	100	2,062	20,617	276	760	2,755	357	493	1,382
Beacon Housing Association	89	4	148	37,084	44	279	6,349	12	44	3,652
Milton Keynes Development Corporation	90	-	-	-	257	1,952	7,596	72	225	3,132
National Foundation for Educational Research(NFER)	91	207	6,576	31,768	117	781	6,676	151	310	2,052
NFER Publishing	92	-	-	-	8	16	1,965	4	9	2,326
Community Impact Bucks	94	2	35	17,657	8	21	2,612	9	12	1,317

Employer	Code	Active Members			Pensioners			Deferred Pensioners		
		Number	Actual Pay	Average	Number	Annual Pensions	Average	Number	Annual Pensions	Average
			£ (000)	£		£ (000)	£		£ (000)	£
Bucks Vision	95	1	29	28,700	7	19	2,741	6	22	3,663
Bucks Arts Association	96	-	-	-	-	-	-	3	6	2,049
Paradigm Housing	97	11	428	38,924	63	373	5,919	18	60	3,315
Bucks New University College	98	332	8,655	26,068	314	963	3,066	398	564	1,417
Teachers Premature Retirement	100	-	-	-	1	1	787	-	-	-
Ayl.Vale Local Elect	101	1	20	20,000	2	3	1,272	-	-	-
S.Bucks.Parl.Elect.	104	1	12	12,000	2	0	149	-	-	-
Chiltern Local Elect	105	1	6	6,000	-	-	-	-	-	-
Axise Code 108	108	1	12	12,000	2	2	960	-	-	-
Wycombe Local Electn	109	2	18	9,000	-	-	-	-	-	-
Wolverton And Greenleys T.C.	111	2	44	22,141	-	-	-	2	1	378
Woburn Sands T.C.	113	1	18	18,201	-	-	-	-	-	-
Aylesbury T.C.	114	9	202	22,473	1	10	10,081	3	9	3,024
Excelcare	115	9	95	10,593	12	24	2,009	17	29	1,703
Mouchel Business Services Ltd	116	304	7,532	24,777	64	375	5,857	116	308	2,656
Little Marlow P.C.	117	1	10	9,779	-	-	-	-	-	-
Great Missenden P.C.	118	1	20	20,425	-	-	-	-	-	-
Wycombe Dial A Ride	119	2	29	14,741	3	3	981	1	0	27
Campbell Park P.C	121	8	179	22,431	-	-	-	-	-	-
Farnham Royal P.C.	122	-	-	-	-	-	-	1	3	2,723
Chilterns Conservation Board	123	8	262	32,799	1	2	2,407	2	5	2,639
Princes Risborough T.C.	124	2	27	13,430	-	-	-	-	-	-
Stony Stratford T.C.	125	2	29	14,496	-	-	-	-	-	-
Shenley Church End P.C.	126	3	47	15,638	-	-	-	-	-	-
Hazlemere P.C.	127	5	83	16,602	-	-	-	-	-	-
Catermasters	128	1	17	16,960	-	-	-	-	-	-
Connaught	129	2	75	37,495	2	22	11,234	2	17	8,407
Shenley Brook End and Tattenhoe P.C	130	3	73	24,170	-	-	-	2	9	4,267
Stantonbury P.C.	131	3	54	17,836	-	-	-	-	-	-
ASM Metal Recycling Limited	132	1	25	25,497	-	-	-	-	-	-

Employer	Code	Active Members			Pensioners			Deferred Pensioners		
		Number	Actual Pay	Average	Number	Annual Pensions	Average	Number	Annual Pensions	Average
			£ (000)	£		£ (000)	£		£ (000)	£
Vale of Aylesbury Housing Trust	133	100	2,865	28,646	24	92	3,823	36	84	2,322
Chesham Bois P.C.	134	1	14	13,769	-	-	-	-	-	-
Hazeley School	135	55	797	14,488	-	-	-	15	7	435
Woughton Community Council	136	2	57	28,584	-	-	-	-	-	-
Hightown Praetorian	137	4	68	17,069	3	13	4,385	-	-	-
Winslow T.C.	138	1	16	16,056	1	0	225	-	-	-
Busy Bee Cleaning Services	139	1	4	3,725	-	-	-	-	-	-
Connexions (Bucks)	140	72	1,666	23,136	1	0	113	9	17	1,906
Wolverton And Watling Way Pool	141	1	32	31,788	-	-	-	-	-	-
Amey Plc	142	18	380	21,138	1	4	3,571	1	2	2,366
Walton High School	143	73	1,135	15,546	3	7	2,198	17	6	347
Betteklean	144	-	-	-	-	-	-	2	1	416
MK Academy	145	77	1,382	17,954	1	0	145	9	2	222
Pitney Bowes	146	4	112	27,933	-	-	-	-	-	-
NorthgateArinso	147	23	576	25,049	-	-	-	1	1	1,015
Ringway Jacobs	148	40	1,355	33,871	1	9	8,903	1	0	259
Police Superintendents Assoc	149	2	59	29,681	-	-	-	-	-	-
SDK (Environmental) Ltd	150	2	54	26,905	-	-	-	-	-	-
Hambleden P.C.	151	1	5	4,642	-	-	-	-	-	-
West Wycombe P.C.	152	1	6	6,122	-	-	-	-	-	-
Aylesbury Vale Academy	153	33	717	21,741	-	-	-	-	-	-
Hays Specialist Recruitment	154	1	26	26,330	-	-	-	-	-	-
Aylesbury Vale Advantage	155	1	97	96,900	-	-	-	-	-	-
Aylesbury Vale Community Trust	156	3	51	17,113	-	-	-	-	-	-
OBMH	158	17	384	22,603	-	-	-	2	12	5,948
Cygnat Foods	159	13	109	8,382	-	-	-	-	-	-
Piddington and Wheeler End P.C.	160	1	3	3,457	-	-	-	-	-	-
Connection FS	161	5	87	17,329	-	-	-	-	-	-
Brooksward School	162	16	135	8,413	1	2	2,315	-	-	-
Eaton Mill Primary School	163	14	191	13,640	1	2	1,911	1	3	3,054



Employer	Code	Active Members			Pensioners			Deferred Pensioners		
		Number	Actual Pay	Average	Number	Annual Pensions	Average	Number	Annual Pensions	Average
			£ (000)	£		£ (000)	£		£ (000)	£
Oakgrove School	164	58	923	15,907	-	-	-	9	8	846
Archgate Cleaning	169	1	7	7,354	-	-	-	-	-	-
Total		20,445	386,700	18,914	12,227	52,874	4,324	18,175	21,798	1,199

## **Appendix 5. Rates and Adjustments Certificate**

Richard Ambrose  
Head of Finance and Commercial Services  
Buckinghamshire County Council  
County Hall  
Aylesbury  
Bucks

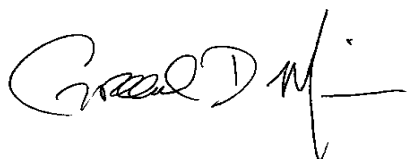
Dear Sirs

On your instruction, we have made an actuarial valuation of the Buckinghamshire County Council Pension Fund ("the Fund") as at 31 March 2010.

In accordance with Regulation 36 of The Local Government Pension Scheme (Administration) Regulations 2008 we have made an assessment of the contributions which should be paid to the Fund by the employing authorities as from 1 April 2011 in order to maintain the solvency of the Fund.

The required contribution rates are set out in the following Contribution Schedule.

Yours faithfully



**Graeme D Muir FFA**



**Alison Hamilton FFA**

## Contribution Schedule

The Common Rate of Contribution payable by each employing authority under Regulation 36 for the period 1 April 2011 to 31 March 2014 is 19.0% of pensionable payroll.

Individual Adjustments payable by each employing authority under Regulation 36 for the period 1 April 2011 to 31 March 2014 resulting in Minimum Total Contribution Rates are as set out below: -

Code	Employer	2010 Funding Pool	Minimum Level of Contributions			Additional monetary amount		
			% of payroll			for deficit recovery		
			2011/12	2012/13	2013/14	2011/12	2012/13	2013/14
1	<b>Buckinghamshire County Council</b>	Bucks County Council	22.8%	22.8%	22.8%			
25	Beaconsfield High School	Bucks County Council	22.8%	22.8%	22.8%			
65	Beechview Middle School	Bucks County Council	22.8%	22.8%	22.8%			
26	Brookmead School	Bucks County Council	22.8%	22.8%	22.8%			
67	Brushwood Middle School	Bucks County Council	22.8%	22.8%	22.8%			
68	Castlefield School	Bucks County Council	22.8%	22.8%	22.8%			
27	Chalfonts Community College	Bucks County Council	22.8%	22.8%	22.8%			
66	The Cottesloe School	Bucks County Council	22.8%	22.8%	22.8%			
39	Danesfield School	Bucks County Council	22.8%	22.8%	22.8%			
38	Gerrards Cross CE School	Bucks County Council	22.8%	22.8%	22.8%			
35	Great Marlow School	Bucks County Council	22.8%	22.8%	22.8%			
56	Hamilton Primary School	Bucks County Council	22.8%	22.8%	22.8%			
42	Holmer Green Upper School	Bucks County Council	22.8%	22.8%	22.8%			
37	Loudwater Combined School	Bucks County Council	22.8%	22.8%	22.8%			
28	Overstone Combined School	Bucks County Council	22.8%	22.8%	22.8%			
59	The Royal Grammar School	Bucks County Council	22.8%	22.8%	22.8%			
69	Waddesdon C E School	Bucks County Council	22.8%	22.8%	22.8%			
20	Bucks MK Fire Authority	Bucks & MK Fire Authority	19.2%	19.2%	19.2%			
40	Thames Valley Police Authority	Thames Valley Police Authority	15.5%	15.5%	15.5%			
50	<b>Milton Keynes Council</b>	Milton Keynes Council	19.1%	19.1%	19.1%			
41	Denbigh School	Milton Keynes Council	19.1%	19.1%	19.1%			
10	Germander Park School	Milton Keynes Council	19.1%	19.1%	19.1%			

Code	Employer	2010 Funding Pool	Minimum Level of Contributions			Additional monetary amount		
			% of payroll			for deficit recovery		
			2011/12	2012/13	2013/14	2011/12	2012/13	2013/14
9	Glastonbury Thorn First School	Milton Keynes Council	19.1%	19.1%	19.1%			
135	Hazeley School	Milton Keynes Council	19.1%	19.1%	19.1%			
57	Lord Grey School	Milton Keynes Council	19.1%	19.1%	19.1%			
8	Loughton School	Milton Keynes Council	19.1%	19.1%	19.1%			
16	New Bradwell Combined School	Milton Keynes Council	19.1%	19.1%	19.1%			
14	Ousedale School	Milton Keynes Council	19.1%	19.1%	19.1%			
7	Portfields Combined School	Milton Keynes Council	19.1%	19.1%	19.1%			
58	The Radcliffe School	Milton Keynes Council	19.1%	19.1%	19.1%			
6	Shenley Brook End School	Milton Keynes Council	19.1%	19.1%	19.1%			
5	Southwood Middle School	Milton Keynes Council	19.1%	19.1%	19.1%			
13	St Paul's R C School	Milton Keynes Council	19.1%	19.1%	19.1%			
48	Stanton School	Milton Keynes Council	19.1%	19.1%	19.1%			
36	Two Mile Ash School	Milton Keynes Council	19.1%	19.1%	19.1%			
51	Aylesbury Vale D.C.	Aylesbury Vale District Council	23.0%	23.0%	23.0%			
52	South Bucks District Council	South Bucks District Council	22.9%	22.9%	22.9%			
53	Chiltern District Council	Chiltern District Council	25.6%	26.6%	27.6%			
78	Chiltern Crematorium	Chiltern District Council	25.6%	26.6%	27.6%			
55	Wycombe District Council	Wycombe District Council	18.7%	18.7%	18.7%			
116	Mouchel Business Services Ltd	Mouchel Business Services Ltd	13.3%	14.0%	14.8%			
11	West Bletchley Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
12	Bletchley/Fenny Stratford Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
21	Buckingham Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
23	Iver Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
43	Wooburn And Bourne End Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
44	Newport Pagnell Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			

Code	Employer	2010 Funding Pool	Minimum Level of Contributions			Additional monetary amount		
			% of payroll			for deficit recovery		
			2011/12	2012/13	2013/14	2011/12	2012/13	2013/14
71	Amersham Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
72	Aston Clinton Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
74	Valuation Tribunal Service	Small Scheduled Bodies	21.2%	21.2%	21.2%			
75	Burnham Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
76	Chalfont St Giles Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
77	Chalfont St Peter Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
79	Chesham Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
80	Denham Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
81	Gerrards Cross Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
82	Marlow Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
83	Olney Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
84	Chepping Wycombe Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
86	Lane End Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
87	Wendover Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
111	Wolverton And Greenleys Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
113	Woburn Sands Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
114	Aylesbury Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
117	Little Marlow Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
118	Great Missenden Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
121	Campbell Park Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
124	Princes Risborough Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
125	Stony Stratford Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
126	Shenley Church End Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
127	Hazlemere Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
130	Shenley Brook End and Tattenhoe Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
131	Stantonbury Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
134	Chesham Bois Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
136	Woughton Community Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
138	Winslow Town Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
151	Hambleton Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			

Code	Employer	2010 Funding Pool	Minimum Level of Contributions			Additional monetary amount		
			% of payroll			for deficit recovery		
			2011/12	2012/13	2013/14	2011/12	2012/13	2013/14
152	West Wycombe Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
160	Piddington and Wheeler End Parish Council	Small Scheduled Bodies	21.2%	21.2%	21.2%			
91	National Foundation for Educational Research(NFER)	NFER	12.8%	12.8%	12.8%			
18	Aylesbury Vale Dial-A-Ride	Small Admitted Bodies	20.3%	21.4%	22.5%			
22	Bucks Association For Local Councils	Small Admitted Bodies	20.3%	21.4%	22.5%			
85	Race Equality Council	Small Admitted Bodies	20.3%	21.4%	22.5%			
94	Community Impact Bucks	Small Admitted Bodies	20.3%	21.4%	22.5%			
95	Bucks Vision	Small Admitted Bodies	20.3%	21.4%	22.5%			
119	Wycombe Dial A Ride	Small Admitted Bodies	20.3%	21.4%	22.5%			
88	The Fremantle Trust	Fremantle Trust	20.7%	20.7%	20.7%	£719,500	£719,500	£719,500
89	Beacon Housing Association	Beacon Housing Association	22.4%	22.4%	22.4%	£137,100	£137,100	£137,100
97	Paradigm Housing	Paradigm Housing	19.3%	19.3%	19.3%	£22,260	£22,260	£22,260
46	Heritage Care	Heritage Care	16.2%	16.2%	16.2%	£37,600	£37,600	£37,600
133	Vale of Aylesbury Housing Trust	Vale of Aylesbury Housing Trust	15.4%	16.4%	17.4%			
137	Hightown Praetorian	Hightown Praetorian	15.9%	16.9%	17.8%			
24	Stantonbury Campus	Stantonbury Campus	18.3%	18.3%	18.3%			
29	Milton Keynes College	Milton Keynes College	14.6%	14.6%	14.6%			
31	Aylesbury College	Aylesbury College	16.4%	16.4%	16.4%			
34	Amersham and Wycombe College	Amersham & Wycombe College	18.5%	18.5%	18.5%			
98	Bucks New University College	Buckinghamshire New University	16.8%	17.5%	18.3%			
143	Walton High School	Milton Keynes Council	19.1%	19.1%	19.1%			
162	Brooksward School	Milton Keynes Council	19.1%	19.1%	19.1%			
163	Premier Academy	Milton Keynes Council	19.1%	19.1%	19.1%			
164	Oakgrove School	Milton Keynes Council	19.1%	19.1%	19.1%			

Code	Employer	2010 Funding Pool	Minimum Level of Contributions			Additional monetary amount		
			% of payroll			for deficit recovery		
			2011/12	2012/13	2013/14	2011/12	2012/13	2013/14
	Olney Infants School	Milton Keynes Council	19.5%	19.5%	19.5%			
153	Aylesbury Vale Academy	Aylesbury Vale Academy	22.8%	22.8%	22.8%			
145	MK Academy	MK Academy	19.1%	19.1%	19.1%			
140	Connexions (Bucks)	Connexions (Bucks)	14.0%	14.0%	14.0%			
141	Wolverton And Watling Way Pool	Wolverton And Watling Way Pool	18.0%	18.0%	18.0%			
115	Excelcare	Excelcare	19.1%	19.1%	19.1%			
142	Amey Plc	Amey Plc	12.8%	13.3%	13.8%			
146	Pitney Bowes	Pitney Bowes	16.0%	16.0%	16.0%			
147	NorthgateArinso	NorthgateArinso	15.0%	15.0%	15.0%			
148	Ringway Jacobs	Ringway Jacobs	21.9%	21.9%	21.9%			
150	SDK (Environmental) Ltd	SDK (Environmental) Ltd	23.2%	23.2%	23.2%			
154	Hays Specialist Recruitment	Hays Specialist Recruitment	15.0%	15.9%	16.9%			
155	Aylesbury Vale Advantage	Aylesbury Vale Advantage	15.0%	15.0%	15.0%			
156	Aylesbury Vale Community Trust	Aylesbury Vale Community Trust	23.1%	23.1%	23.1%			
158	OBMH	OBMH	15.8%	15.8%	15.8%			
159	Cygnets Foods	Cygnets Foods	14.9%	15.2%	15.4%			
161	Connection FS	Connection FS	15.0%	15.0%	15.0%			
169	Archgate Cleaning	Archgate Cleaning	22.8%	22.8%	22.8%			
123	Chilterns Conservation Board	Chilterns Conservation Board	14.1%	14.1%	14.1%			
165	Ambassadors Theatre	Ambassadors Theatre	23.0%	23.0%	23.0%			
166	Hertsmere Leisure Trust	Milton Keynes Council	19.1%	19.1%	19.1%			
107	MK Dons	Milton Keynes Council	19.1%	19.1%	19.1%			
47	Penn School	Bucks County Council	22.8%	22.8%	22.8%			

Code	Employer	2010 Funding Pool	Minimum Level of Contributions			Additional monetary amount		
			% of payroll			for deficit recovery		
			2011/12	2012/13	2013/14	2011/12	2012/13	2013/14
132	ASM Metal Recycling Ltd	Bucks County Council	22.8%	22.8%	22.8%			
168	Brayborne Cleaning	Bucks County Council	22.8%	22.8%	22.8%			
170	Action for Children	Bucks County Council	22.8%	22.8%	22.8%			
-	Dr Challoner's Grammar School	Bucks County Council	22.8%	22.8%	22.8%			
171	Risk Management	Risk Management	14.6%	14.6%	14.6%			
149	Police Superintendents Association	Thames Valley Police Authority	15.5%	15.5%	15.5%			

## Notes

1. Further sums should be paid to the Fund to meet the costs of any early retirements using methods and assumption issued by us from time to time.
2. The certified contribution rates represent the minimum level of contributions to be paid. Employing authorities may pay further amounts at any time and future periodic contributions may be adjusted on a basis approved by ourselves.
3. The rate for employer 91 – NFER is subject to review by ourselves after 31 March 2011.



## Appendix 6. LGPS Benefits

LGPS 1997		LGPS 2008	
General Features			
Type of Scheme	Final salary		
Relationship with S2P	Contracted-out		
Member Contributions	6%	Banded Contributions based on full time pay as at 1 <sup>st</sup> April 2011	
	5% for manual workers in scheme prior to 01/04/1998		
		Bands to be increased annually with Pension Increase Orders.	
	Transitional protection for members currently paying 5% until 2011/2012.		
Final Pay	In general, best of the last 3 years pensionable pay		
Pensionable Pay	Normal salary plus any shift allowance, bonuses, contractual overtime, Maternity Pay, Paternity Pay, Adoption Pay and any other taxable benefit specified as being pensionable.		
Retirement Benefits			
Normal Retiring Age	Age 65		
Early Retirement	Age 55+ (existing members remains at age 50+ for retirements up to 31 March 2010. Employer consent required if below age 60.  Minimum 3 months membership or transfer in  Benefits reduced unless Rule of 85 applies (member of the scheme as at 30 <sup>th</sup> September 2006)  Rule of 85 does not apply for service from 1 April 2008, subject to transitional protections.  Employer's discretion to waive any actuarial reduction. No reductions applied for redundancy retirements.		
Transitional Protections	If born before 1 April 1960 and an existing member of the Scheme as at 30 September 2006 then 85 year rule stays for service up to 1 April 2016 with tapered protection to 1 April 2020.		

LGPS 1997		LGPS 2008
General Features		
Flexible Retirement	Age 55+	
	(existing members remains at age 50+ for retirements up to 31/03/2010)	
	Minimum 3 months membership or transfer in	
	Reduce hours or move to a lower graded post	
	Draw pension and salary	
		Employers discretion to waive any actuarial reduction
Late Retirement	Continue to day before eve of 75 <sup>th</sup> birthday	
		Benefits accrue to date of retirement
Ill Health Retirement	Permanently unable to undertake own job or any comparable job with employer. Benefits are enhanced as per the table below with a maximum enhancement of potential membership to age 65	
	Permanently unable to undertake own job or any comparable job with employer. Benefits are graded based on how likely you are to be capable of gainful employment after you leave.	
	Accrued Membership	Benefit Payable
	Less than 3 months	Refund of contributions
	3 months to 5 yrs	Accrued Membership
	5 but less than 10 yrs	Membership Doubled
	10 yrs to 13 yrs 122 days	Membership Enhanced to 20 yrs
	13 yrs 123 days or more	Membership Enhanced by 6 2/3 yrs
		<b>First Tier</b> - No reasonable prospect of alternative employment ever again then service enhanced by 100% of prospective service to age 65.
		<b>Second Tier</b> - No prospect of obtaining gainful employment within a reasonable period of leaving local government employment, but likely to be able to obtain gainful employment before 65 then service enhanced by 25% of prospective service.
		<b>Third Tier</b> - Reduced likelihood of obtaining gainful employment within 3 years of leaving, or before age 65 if earlier then no service enhancement. Payment of these benefits will be stopped after 3 years, or earlier if the member is in gainful employment or becomes capable of such employment, provided they are not age 65 by then.
Benefit Accrual	Pension = 1/80 <sup>th</sup>	Pension = 1/60 <sup>th</sup>
	Lump Sum = 3/80 <sup>th</sup> plus increased lump sum by commutation 12:1 up to a maximum of 25% of lifetime allowance	Lump Sum = By commutation 12:1 up to a maximum of 25% of lifetime allowance
	Spouse's Pension = 1/160 <sup>th</sup>	Spouse's Pension = 1/160 <sup>th</sup>
Death and Survivor Benefits		
Lump Sum Death Benefit	Active = 2 x Pensionable Pay	Active = 3 x Pensionable Pay
	Deferred = Current value of deferred lump sum	Deferred = 5 x Current value of deferred annual pension

LGPS 1997		LGPS 2008
General Features		
	Pensioner = 5 year guarantee less pension paid	Pensioner = 10 year guarantee less pension paid (for death before age 75)
Dependants' Provision	Widow(er)s  Registered civil partners	Widow(er)s  Registered civil partners  Nominated cohabiting partners
Dependants' Pension (Death in Service)	If membership > 3 months  50% x notional ill health pension  Otherwise 1/160 <sup>th</sup> x accrued membership	1/160th x full prospective service to age 65
Spouse's Short Term Pension	Active = 3 months x salary (increased to 6 months if dependent children)  Deferred = none  Pensioner = 3 months x member's pension (increased to 6 months if dependent children)	None
Children's Pensions	<b>Surviving Parent</b>  1 child = 1/4 x notional pension  2+ children = 1/2 x notional pension divided by number of children  <b>Orphans</b>  1 child = 1/3 x notional pension  2+ children = 2/3 x notional pension divided by number of children  For death in service the notional pension is the ill health pension or a pension based on the lesser of 10 years and full service to age 65 where this is higher.	<b>Surviving Parent</b>  1 child = 1/2 x dependant's pension  2+ children = 1 x dependant's pension divided by number of children  <b>Orphans</b>  1 child = 2/3 x dependant's pension  2+ children = 1 1/3 x dependant's pension divided by number of children
Increasing Benefits		
AVCs	Maximum contributions – 50% of taxable earnings  Options available:  Open market annuity  LGPS Top Up Pension  Tax Free Lump Sum (100% of fund up to max of 25% of Lifetime Allowance)	

LGPS 1997		LGPS 2008	
General Features			
	LGPS Service Credit (if commenced AVCs prior to 13/11/2001)		
Added Years/Pension	Maximum purchase 6 2/3 years  Payable from next birthday to age 65 (contracts taken out before 01/10/2006 may have an earlier date than age 65)	Maximum purchase £5,000 extra pension (in multiples of £250).	
Leaving the Scheme			
Benefits on Leaving	<b>Less than 3 months membership and no transfer in</b>  Refund of contributions  CETV  Defer decision  <b>More than 3 months membership or transfer in</b>  CETV  Defer Benefits until NRA		