Somerset County Council Pension Fund

Actuarial Valuation as at 31 March 2010
Valuation Report

Barnett Waddingham
Public Sector Consulting

30 March 2011

Somerset County Council
County Hall
Taunton
Somerset TA1 4DY

Dear Sirs

Actuarial Valuation as at 31 March 2010

We have carried out an actuarial valuation of the Somerset 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 Somerset County Council as administering authority to the Fund. It is not intended to assist any user other than Somerset 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.

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 ourselves 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 95% of the accrued liabilities of the Fund. The Total Required Contribution Rate was certified as 14.7% of payroll which assumed that the past service funding level would be restored over a period of 25 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. 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.

1.3.4 Full current 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 the Somerset 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	285,457	27%
Overseas Equities	505,918	47%
Corporate Bonds	94,321	9%
Cash	27,613	3%
UK Gilts	72,034	7%
Overseas Bonds	24,291	2%
Property	78,519	7%
Other assets	-	-
Alternative assets	(12,629)	(1%)
Total	**1,075,524**	**100%**

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 -2.9% 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".

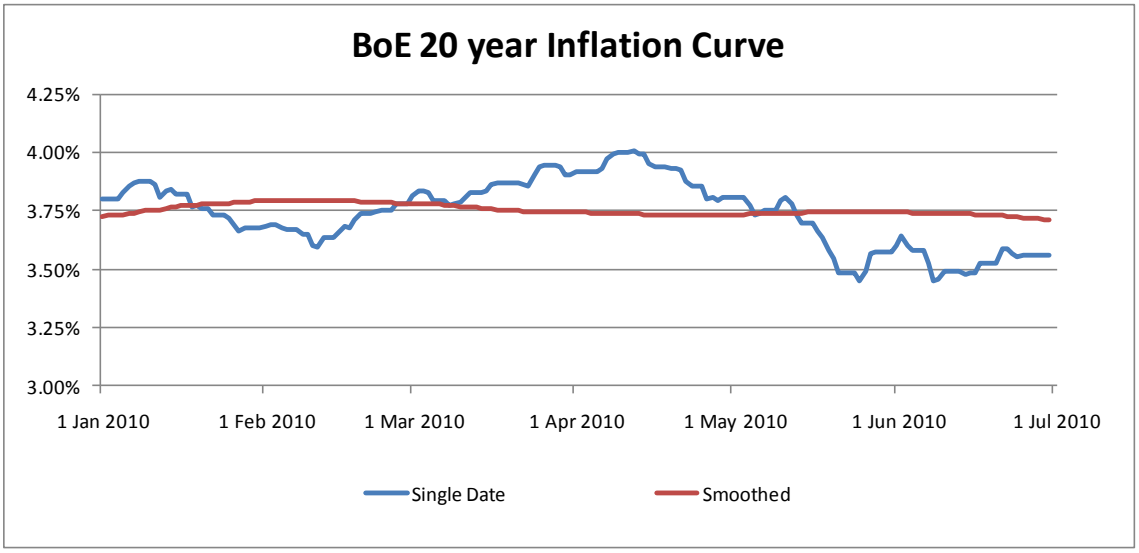
4 Financial Assumptions and Experience

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 this valuation is that pay increases, over and above increases due to promotion and other increments (or "salary scales"), will in the longer term exceed price inflation by 1.5% per annum in the longer term.

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 incremental 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.
Net equity yield	3.3%
Inflation	3.5%
plus assumed real capital return	1.0%
Equity Return	7.8%

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	7.8%	4.3%	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%	6.9%	3.6%
Risk Adjusted Discount Rate	7.0%	3.5%		
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.

4.6 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	Assumed	Difference
	% p.a.	% p.a.	% p.a.
Investment Return	-2.9%	6.9%	(9.8%)
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 less than assumed.
- Pay increases were broadly 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 intervaluation period compared to the assumptions adopted at the previous valuation.

Active Membership Movements	Actual	Assumed	Difference %
Early Leavers	5,675	6,268.7	(9%)
Deaths in Service	58	82	(29%)
Retirements			
Ill health	78	111.7	(30%)
Age	1,328		
Voluntary	-		
Redundancy	253		
Efficiency	29		
Total	**1,688**		

5.1.2 There were fewer early leavers than expected and also fewer ill-health retirements than expected.

5.1.3 Overall the demographic experience of the Fund during the intervaluation period compared to the assumptions adopted at the previous valuation was a positive factor during the intervaluation 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.

Pensioner Deaths By Number	Pensioners	Dependants	Total
Actual	515	203	**718**
Assumed	496	189	**685**
% Difference	4%	8%	**5%**
By Amount of Pension	**£(000)**	**£(000)**	**£(000)**
Actual	1,930	336	**2,266**
Assumed	1,835	317	**2,152**
% Difference	5%	6%	**5%**

5.2.3 The number of pensioners dying during the intervaluation period was higher than expected. In terms of the amount of pension ceasing then this was also more 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 nor 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, as for many active members, 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

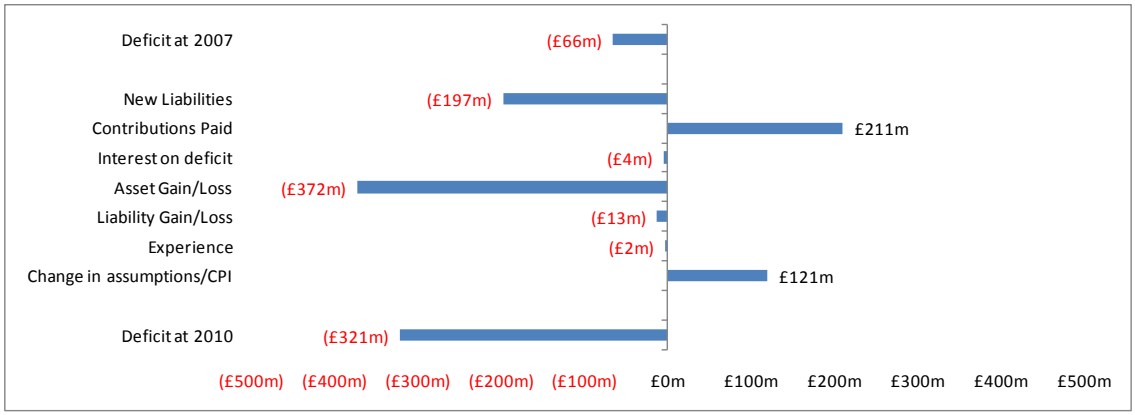
- The past service funding position
- The required average ongoing employer contribution rate for future service benefits
- The required total employer contribution rate to restore the funding position to 100% over the agreed 25 year period following the valuation date.

Past Service Funding Position	£(000)
Smoothed Asset Value	1,068,300
Past Service Liabilities	
Active Members	604,314
Deferred Pensioners	186,432
Pensioners	598,993
Value of Scheme Liabilities	1,389,739
Surplus (Deficit)	(321,439)
Funding Level	77%
Employer Contribution Rates	
Future Service Contribution Rate	13.1%
Deficit recovery (25 years)	4.8%
Total Contribution Rate	**17.9%**

6.1.2 As we see, the funding level was 77% and the average required employer contribution to restore the funding position to 100% over the next 25 years is 17.9% 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.

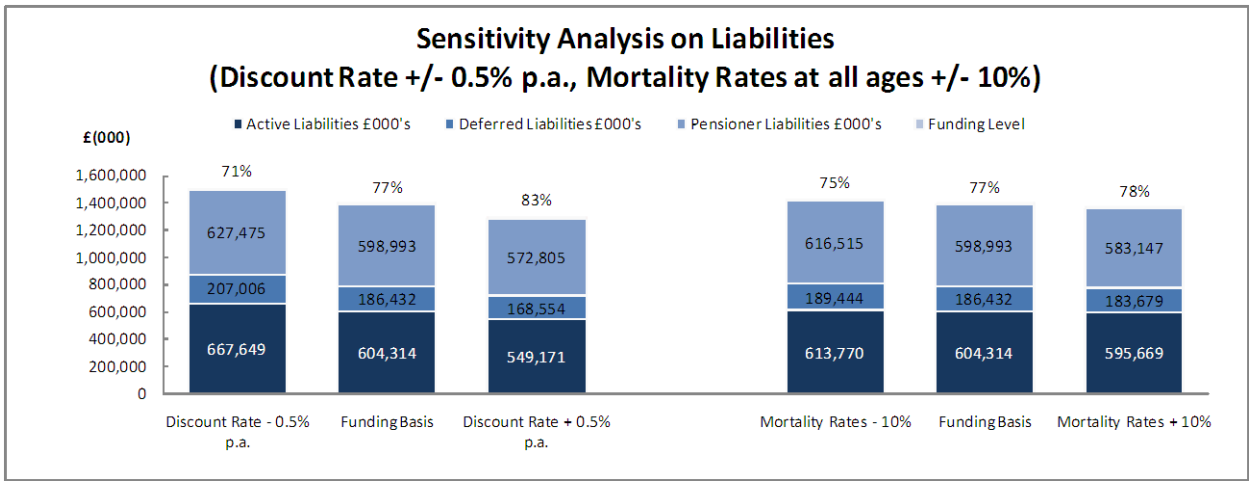


6.2.2 As we can see, overall the deficit has increased during the intervaluation period.

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 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 results of this analysis is shown in the chart below:



7 Comments and Conclusions

7.1 Financial Position

7.1.1 The funding level has reduced since the 2007 valuation.

7.1.2 Whilst CPI changes and other assumption changes had a positive effect on the funding position these were offset by the poor investment returns during the intervaluation period.

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 25 years.

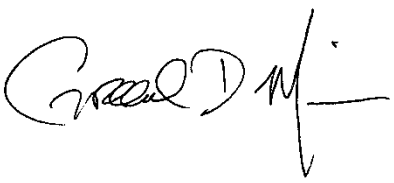
7.2.2 The certified contribution rates for each employer are set out in our certificate in Appendix 5.

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	Number		Actual Pensionable Pay £ (000)		Average £	
Full Time	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**
Males	3,987	4,037	107,757	97,806	27,027	24,228
Females	5,183	5,106	125,252	109,933	24,166	21,530
Part Time						
Males	1,111	968	12,049	9,230	10,845	9,535
Females	9,766	8,611	88,121	75,694	9,023	8,790
Total	**20,047**	**18,722**	**333,179**	**292,663**	**16,620**	**15,632**

Pensioners	Number		Annual Pensions £ (000)		Average £	
	2010	**2007**	**2010**	**2007**	**2010**	**2007**
Males	4,190	3,639	28,257	22,168	6,744	6,092
Females	5,327	4,147	14,813	10,616	2,781	2,560
Dependants	1,564	1,293	2,798	2,861	1,789	2,212
Total	**11,081**	**9,079**	**45,868**	**35,645**	**4,139**	**3,926**

Deferred Pensioners (incl "undecideds")	Number		Annual Pensions £ (000)		Average £	
	2010	**2007**	**2010**	**2007**	**2010**	**2007**
Males	4,181	3,403	6,909	6,033	1,652	1,773
Females	11,438	8,467	10,344	7,678	904	907
Total	**15,619**	**11,870**	**17,253**	**13,711**	**1,105**	**1,155**

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	285,457	27%
Overseas Equities	505,918	47%
Corporate Bonds	94,321	9%
Cash	27,613	3%
UK Gilts	72,034	7%
Overseas Bonds	24,291	2%
Property	78,519	7%
Other assets	-	-
Alternative assets	(12,629)	(1%)
Total	**1,075,524**	100%

	Year to	March 2010	March 2009	March 2008	TOTAL
Revenue Accounts		£ (000)	£ (000)	£ (000)	£ (000)
EXPENDITURE	Retirement Pensions	45,822	41,048	38,079	124,949
	Retirement Lump Sun	13,423	12,379	8,103	33,905
	Death Benefits	824	1,391	818	3,033
	Leavers benefits	7,468	4,523	8,776	20,767
	Expenses	987	910	897	2,794
	Other Expenditure	-	-	-	-
TOTAL		68,524	60,251	56,673	185,448
INCOME	Employees Ctbns	22,087	21,273	18,905	62,265
	Employers Ctbns	54,084	48,929	46,056	149,069
	Transfer Values	11,314	8,864	8,663	28,841
	Investment Income	30,308	34,230	33,248	97,786
	Other Income	1,615	1,616	1,621	4,852
TOTAL		119,408	114,912	108,493	342,813
Fund Value		£ (000)	£ (000)	£ (000)	£ (000)
Assets at Start of Year		762,249	1,035,250	1,104,061	1,104,061
Cashflow		50,884	54,661	51,820	157,365
Change in value		262,391	(327,662)	(120,631)	(185,902)
Assets at End of Year		1,075,524	762,249	1,035,250	1,075,524
Annual Returns					
Approx Rate of Return		37.9%	-28.0%	-7.8%	-2.9%

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

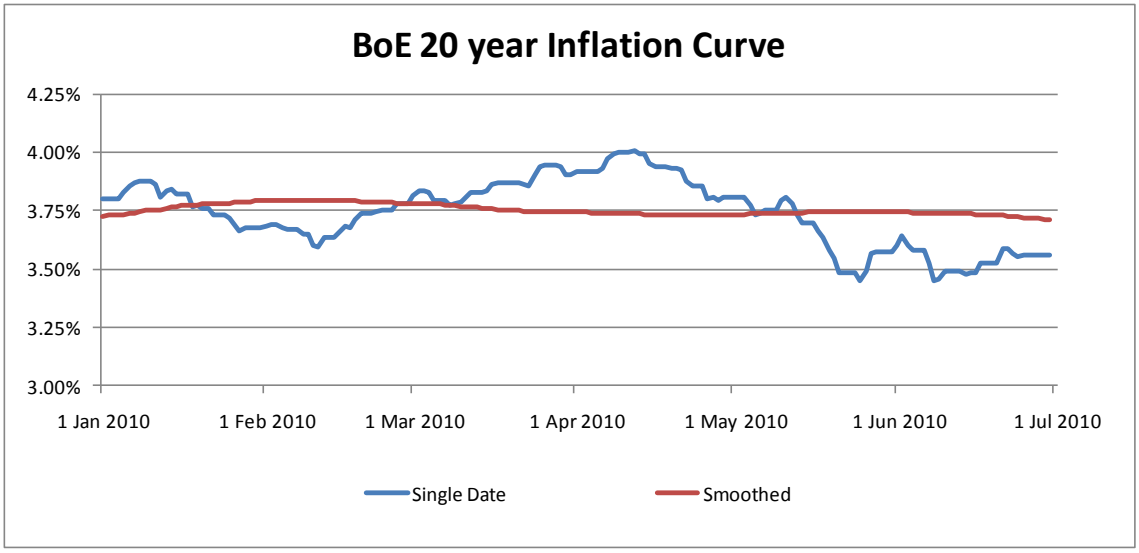
There are number of ways to try to estimate what future levels of inflation might be.

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.

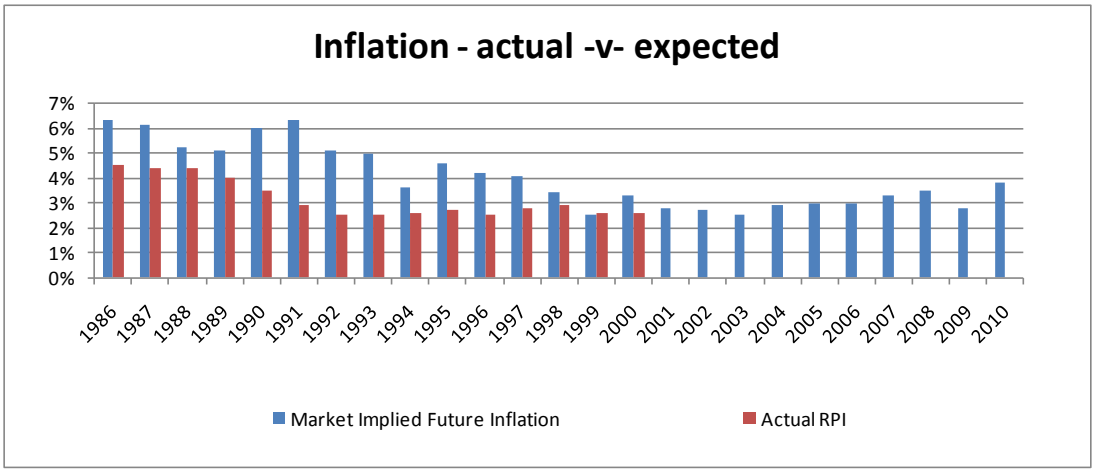


However, one of the issues in adopting such an approach is the arguably imperfect nature of the gilt market. The supplier of gilts (the Government) is a reluctant supplier, especially for long-dated gilts (which are the ones which are most useful for estimating future inflation for pension schemes).

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.

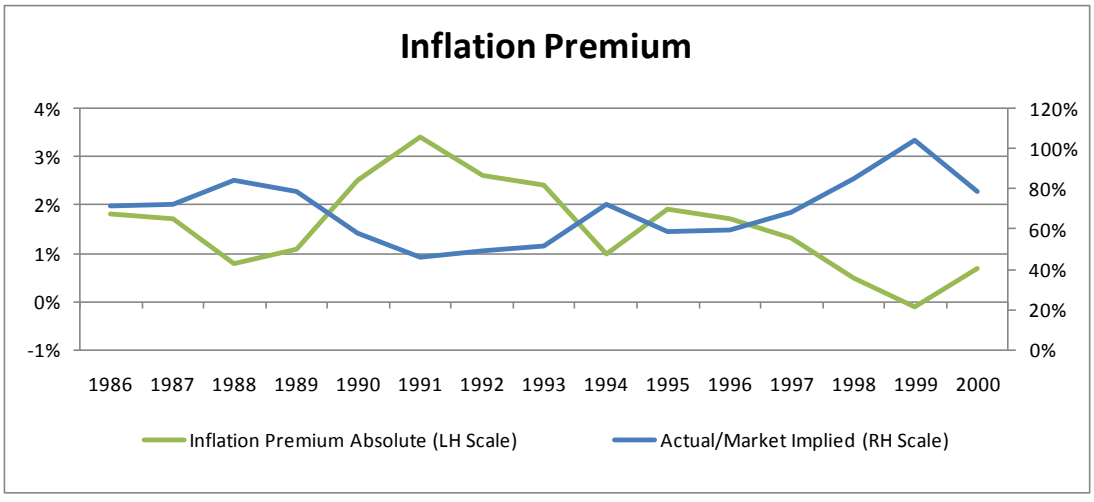
There is also the issue of what is known as the "inflation premium". The argument is that investors will pay a premium for inflation protection and so arguably index-linked gilts are "more expensive" than fixed-interest gilts or equivalently index-linked gilt yields are lower than they might otherwise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



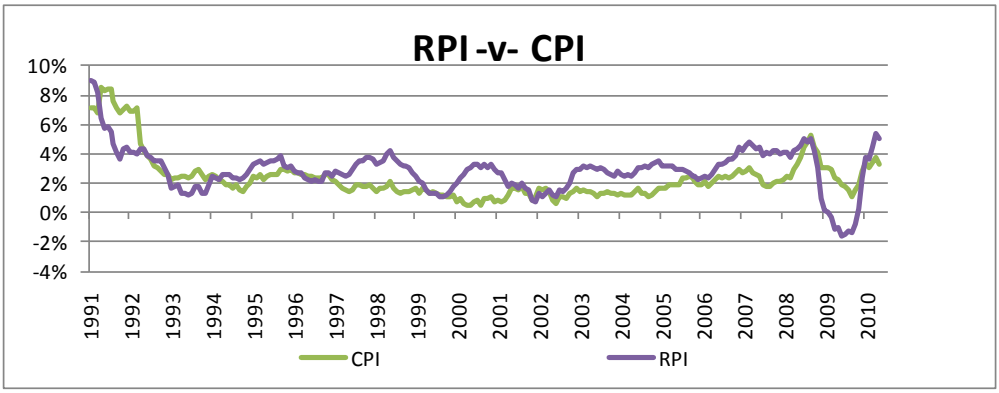
Pension Increases

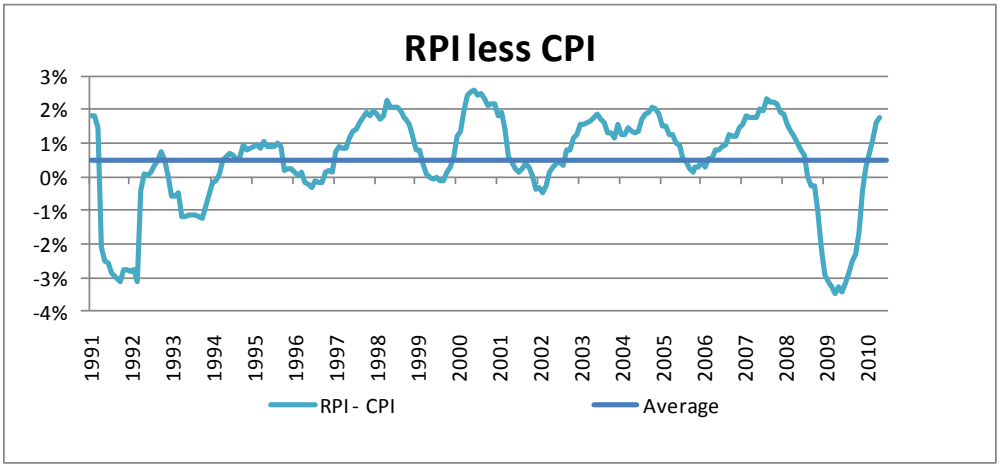
The Retail Price Index has long been the established measure of inflation in the UK. It measures the change in prices of a number of things including housing costs such as mortgage interest payments.

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.





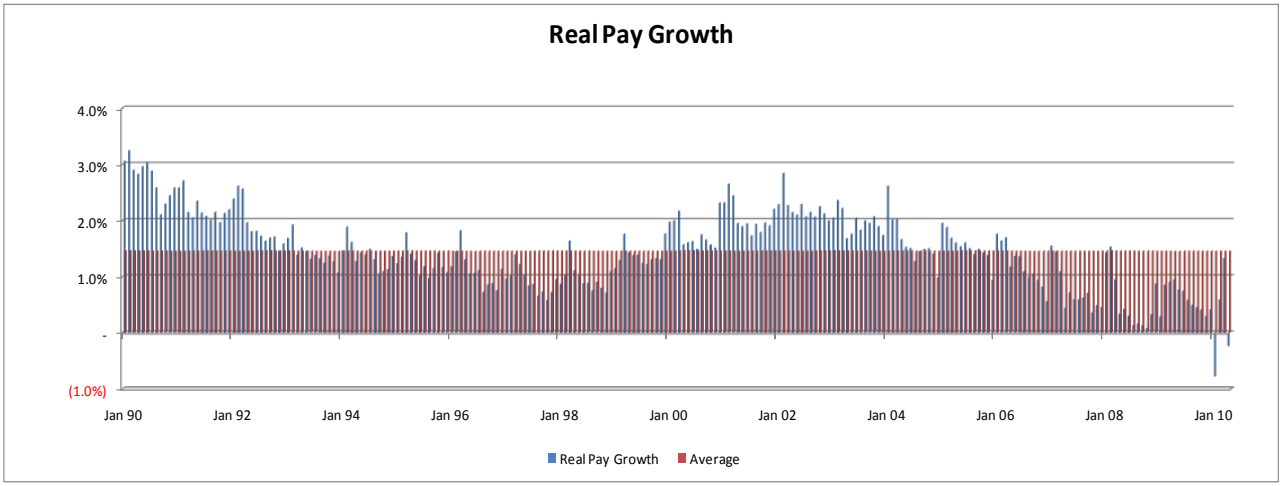
As we see RPI has indeed generally been higher the CPI and the average "gap" over the last 20 years has been around 0.5% per annum.

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

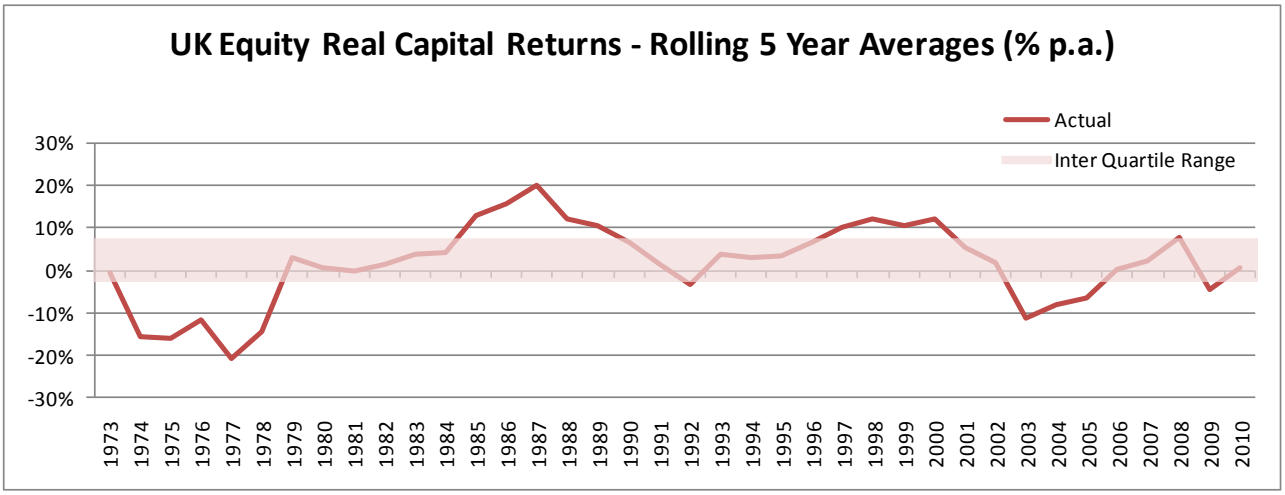
In a market-related valuation it is necessary to assess future average levels of return in current market conditions.

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 have 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 1.0% per annum.

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

Smoothed Equity Returns	March 2010 % p.a.
Equity Risk Premium	
Net equity yield	3.3%
Inflation	3.5%
plus assumed real capital return	1.0%
Equity Return	7.8%

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 – 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	7.8%	4.3%	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%	6.9%	3.6%
Risk Adjusted Discount Rate	7.0%	3.5%		
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: -

	Incidence per 1000 active members per annum								Salary Scales			
	Males				Females							
	Death	Ill Health		Wdls	Death	Ill Health		Wdls	Males	Females	Males	Females
Age		FT	PT			FT	PT		FT	FT	PT	PT
20	0.5	0.0	0.0	400.0	0.2	0.1	0.1	400.0	100.0	100.0	100.0	100.0
25	0.4	0.1	0.1	360.0	0.2	0.1	0.1	360.0	122.8	114.2	100.0	100.0
30	0.3	0.1	0.1	264.0	0.3	0.3	0.3	264.0	145.5	125.8	100.0	100.0
35	0.5	0.3	0.3	184.0	0.5	0.5	0.5	184.0	166.3	133.6	100.0	100.0
40	0.9	0.5	0.5	108.0	0.6	0.8	0.8	108.0	183.1	136.6	100.0	100.0
45	1.3	0.9	0.9	48.0	0.8	1.2	1.2	48.0	194.4	136.6	100.0	100.0
50	2.5	1.6	1.6	-	1.4	2.2	2.2	-	198.8	136.6	100.0	100.0
55	4.3	3.5	3.5	-	2.2	4.2	4.2	-	198.8	136.6	100.0	100.0
60	6.9	7.4	7.4	-	3.1	8.5	8.5	-	198.8	136.6	100.0	100.0
64	11.1	13.2	13.2	-	4.0	11.5	11.5	-	198.8	136.6	100.0	100.0

Other assumptions		
Age Retirements	It is assumed that active members will retire at age 60 or when they would first satisfy the rule of 85 if later, no later than 65, plus 1 year.	
Mortality	All members	90% S1PA Heavy tables allowing for medium cohort projection, with a minimum 1% improvement
	Ill Health Retirement	As above with +5 age rating
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 sums 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

		Active Members			Pensioners			Deferred Pensioners		
Employer	Code	Number	Actual Pay	Average	Number	Annual Pensions	Average	Number	Annual Pensions	Average
			£	£		£	£		£	£
Somerset County Council	1	12,696	168,291,325	13,255	5,915	22,430,488	3,792	9,833	7,756,585	789
Avon & Somerset Police Authority	3	2,832	63,598,164	22,457	1,174	4,070,709	3,467	1,311	1,885,070	1,438
Pre 74 misc members	4	-	-	-	13	6,589	507	1	1,058	1,058
Somerset Care Ltd	5	83	1,471,753	17,732	484	1,013,524	2,094	129	210,057	1,628
Bruton Sexeys School	6	38	505,065	13,291	32	69,171	2,162	28	25,727	919
Bruton Primary School	7	1	7,849	7,849	2	2,727	1,364	10	5,025	503
Wellington St John's Primary School	8	-	-	-	2	2,422	1,211	8	2,792	349
Cannington College	10	-	-	-	37	116,020	3,136	69	109,982	1,594
Bridgwater College	11	468	7,558,605	16,151	83	218,334	2,631	424	407,565	961
Richard Huish Sixth Form College	12	84	1,427,549	16,995	20	72,309	3,615	65	45,844	705
Somerset College Art&Tech	13	175	3,125,419	17,860	105	323,687	3,083	258	246,717	956
Strode College	14	209	3,273,551	15,663	43	103,689	2,411	220	164,032	746
Yeovil College	15	190	3,109,280	16,365	63	155,243	2,464	222	282,042	1,270
Brymore School	16	3	31,772	10,591	19	47,194	2,484	20	21,813	1,091
Charton Horethorne School	17	-	-	-	-	-	-	2	152	76
Enmore Primary School	18	-	-	-	-	-	-	2	2,048	1,024
Somerset Redstone Trust	20	1	14,480	14,480	3	5,578	1,859	1	2,710	2,710
Bristol Waterworks Co	25	-	-	-	3	2,883	961	-	-	-
Burnham Burial Board	27	5	84,415	16,883	7	16,369	2,338	-	-	-
Burnham&Highbridge TC&BB	28	3	68,764	22,921	3	5,768	1,923	-	-	-
Crewkerne TC&BB	33	5	75,881	15,176	-	-	-	3	2,163	721
Glastonbury Town Council	35	5	86,623	17,325	3	7,818	2,606	-	-	-
Shepton Mallet Town Council	36	1	28,600	28,600	-	-	-	1	370	370
Street Parish Council	44	1	18,649	18,649	-	-	-	-	-	-
Minehead Town Council	45	5	77,563	15,513	3	9,714	3,238	8	4,718	590
Yeovil Town Council	46	6	159,136	26,523	8	15,875	1,984	3	2,618	873

Employer	Code	Active Members			Pensioners			Deferred Pensioners		
		Number	Actual Pay	Average	Number	Annual Pensions	Average	Number	Annual Pensions	Average
			£	£		£	£		£	£
Lower Brue Drainage Board	47	11	355,242	32,295	1	22,414	22,414	1	1,053	1,053
Ilminster Town Council	48	3	37,316	12,439	3	5,991	1,997	1	490	490
SHAL Housing Ltd	50	15	371,925	24,795	1	289	289	1	1,116	1,116
Flourish Homes Ltd	51	56	1,310,348	23,399	71	316,175	4,453	60	159,197	2,653
Magna West Somerset HA	52	70	1,484,028	21,200	35	100,072	2,859	56	81,326	1,452
Yarlington Housing Group	54	226	5,584,574	24,711	104	510,046	4,904	149	292,126	1,961
Taunton Joint Burial	55	-	-	-	1	782	782	-	-	-
Homes in Sedgemoor	56	48	1,390,180	28,962	4	5,916	1,479	15	28,916	1,928
Signpost Housing Association	58	-	-	-	4	15,661	3,915	2	2,543	1,272
Wells BB & Parish Council	63	-	-	-	2	5,801	2,900	-	-	-
Wells City Parish Council	64	4	67,851	16,963	-	-	-	1	10,924	10,924
Yeovil Joint Burial Committee	68	-	-	-	-	-	-	-	-	-
Bridgwater Educ Action Zone	88	-	-	-	2	23,289	11,644	-	-	-
National Autistic Society	89	15	267,518	17,835	18	93,490	5,194	20	30,884	1,544
Learning & Skills Network	90	148	7,352,011	49,676	58	435,666	7,511	176	338,869	1,925
North Somerset Drainage Board	91	-	-	-	1	845	845	-	-	-
Martock Parish Council	92	-	-	-	2	4,873	2,436	-	-	-
Ammerdown College	93	-	-	-	1	3,157	3,157	-	-	-
Chard Town Council	94	12	237,495	19,791	8	20,470	2,559	10	7,994	799
Wincanton Town Council	95	2	29,811	14,905	2	5,599	2,800	3	1,139	380
Vaughan Lee House	96	-	-	-	-	-	-	-	-	-
Bridgewater Burial Board	97	-	-	-	1	407	407	-	-	-
Wessex Group Valuation Tribunal	98	-	-	-	3	29,762	9,921	7	23,828	3,404
Frome Town Council	99	10	235,438	23,544	8	35,568	4,446	5	1,639	328
Langport Town Council	100	1	17,230	17,230	-	-	-	-	-	-
Somerset Rural Youth Project	101	5	76,171	15,234	1	301	301	3	2,188	729
South West Regional Assembly Board	102	54	1,813,995	33,593	26	332,666	12,795	60	170,644	2,844
Learning South West	103	20	419,884	20,994	3	32,112	10,704	5	12,061	2,412

Employer	Code	Active Members			Pensioners			Deferred Pensioners		
		Number	Actual Pay	Average	Number	Annual Pensions	Average	Number	Annual Pensions	Average
			£	£		£	£		£	£
South West Regional Development Agency	104	-	-	-	2	4,173	2,086	8	43,217	5,402
Connect South West	105	97	2,212,728	22,812	53	396,843	7,488	103	138,317	1,343
Exmoor National Park	106	92	2,009,214	21,839	28	176,097	6,289	60	91,504	1,525
Avon and Somerset Magistrates Courts Committee	107	-	-	-	79	511,469	6,474	281	939,534	3,344
Avon&Somerset Probation Board	108	476	12,628,028	26,529	137	855,990	6,248	239	414,710	1,735
Axbridge Town Council	110	1	13,193	13,193	-	-	-	-	-	-
Somerton Town Council	111	1	33,000	33,000	-	-	-	2	7,214	3,607
Society of Local Council Clerks	112	11	243,720	22,156	1	2,173	2,173	3	373	124
Tone Leisure Ltd	113	70	1,106,033	15,800	5	5,655	1,131	59	54,991	932
Wellington Town Council	115	1	12,162	12,162	-	-	-	-	-	-
North Petherton Town Council	116	-	-	-	1	8,891	8,891	-	-	-
Williton Parish Council	117	1	10,703	10,703	-	-	-	-	-	-
ECT Recycling Ltd	118	27	556,028	20,594	1	1,667	1,667	2	3,585	1,793
Somerset Leisure Trust	119	71	1,153,142	16,241	1	1,684	1,684	7	9,039	1,291
Care Focus Somerset Ltd	120	2	45,351	22,676	-	-	-	-	-	-
Connaught Homes	121	27	559,492	20,722	-	-	-	-	-	-
Mendip District Council	401	182	4,279,419	23,513	270	1,456,251	5,394	236	435,660	1,846
Sedgemoor District Council	402	306	7,502,016	24,516	609	3,231,679	5,307	365	836,986	2,293
Taunton Deane Borough Council	403	539	12,171,999	22,583	593	3,368,759	5,681	452	795,267	1,759
West Somerset DC	404	94	2,273,023	24,181	180	997,416	5,541	103	220,054	2,136
South Somerset DC	405	538	12,304,177	22,870	569	3,048,386	5,357	506	916,660	1,812
Old fund pensioners (pre 74)	999	-	-	-	170	1,103,357	6,490	-	-	-
Total		**20,047**	**333,178,888**	**16,620**	**11,081**	**45,867,954**	**4,139**	**15,619**	**17,253,139**	**1,105**

Appendix 5. Rates and Adjustments Certificate

Somerset County Council
County Hall
Taunton
Somerset TA1 4DY

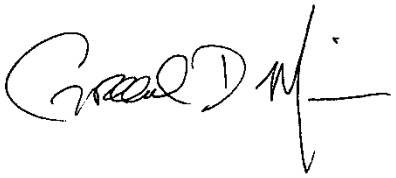
Dear Sirs

On your instruction, we have made an actuarial valuation of the Somerset 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 17.9% 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: -

			Minimum Level of Contributions					
Code	Employer	2010 Employer Pool	2011/12 % Pay	2011/12	2012/13 % Pay	2012/13	2013/14 % Pay	2013/14
Major Employers								
1	Somerset County Council	Somerset County Council	13.5%	£3,770k	13.5%	£4,880k	13.5%	£5,830k
401	Mendip District Council	Mendip District Council	13.0%	£240k	13.0%	£280k	13.0%	£320k
402	Sedgemoor District Council	Sedgemoor District Council	12.9%	£300k	12.9%	£410k	12.9%	£520k
405	South Somerset DC	South Somerset DC	16.5%		17.5%		18.4%	
403	Taunton Deane Borough Council	Taunton Deane Borough Council	16.1%		17.3%		18.4%	
404	West Somerset DC	West Somerset DC	13.2%	£90k	13.2%	£120k	13.2%	£160k
3	Avon & Somerset Police Authority	Avon&Somerset Police Authority	13.7%		13.9%		14.1%	
108	Avon & Somerset Probation Board	Avon&Somerset Probation Board	13.2%	£100k	13.2%	£160k	13.2%	£220k
Somerset County Council Employers								
6	Bruton Sexeys School	Somerset County Council	15.7%		16.3%		16.9%	
Town Councils								
27	Burnham Burial Board	Town Councils	14.6%	£2.7k	14.6%	£2.9k	14.6%	£3.0k
28	Burnham-on-Sea & Highbridge Town	Town Councils	14.6%	£2.2k	14.6%	£2.3k	14.6%	£2.4k
31	Chard Burial Board	Town Councils						
33	Crewkerne Town Council	Town Councils	14.6%	£2.5k	14.6%	£2.6k	14.6%	£2.7k
35	Glastonbury Town Council	Town Councils	14.6%	£2.8k	14.6%	£2.9k	14.6%	£3.0k
36	Shepton Mallet Town Council	Town Councils	14.6%	£0.9k	14.6%	£1.0k	14.6%	£1.0k
43	Long Ashton Parish Council	Town Councils						
44	Street Parish Council	Town Councils	14.6%	£0.6k	14.6%	£0.7k	14.6%	£0.7k
45	Minehead Town Council	Town Councils	14.6%	£2.5k	14.6%	£2.6k	14.6%	£2.7k
46	Yeovil Town Council	Town Councils	14.6%	£5.2k	14.6%	£5.4k	14.6%	£5.6k
47	Lower Brue Drainage Board	Town Councils	14.6%	£11.5k	14.6%	£12.0k	14.6%	£12.5k
48	Ilminster Town Council	Town Councils	14.6%	£1.2k	14.6%	£1.3k	14.6%	£1.3k
64	Wells City Council	Town Councils	17.9%		18.0%		18.1%	
94	Chard Town Council	Town Councils	14.6%	£7.7k	14.6%	£8.0k	14.6%	£8.3k
95	Wincanton Town Council	Town Councils	14.6%	£1k	14.6%	£1k	14.6%	£1k
99	Frome Town Council	Town Councils	14.6%	£7.6k	14.6%	£8.0k	14.6%	£8.3k
100	Langport Town Council	Town Councils	14.6%	£0.6k	14.6%	£0.6k	14.6%	£0.6k
110	Axbridge Town Council	Town Councils	14.6%	£0.4k	14.6%	£0.4k	14.6%	£0.5k
111	Somerton Town Council	Town Councils	14.6%	£1.1k	14.6%	£1.1k	14.6%	£1.2k
112	Society Of Local Council Clerks	Town Councils	14.6%	£7.9k	14.6%	£8.2k	14.6%	£8.5k
115	Wellington Town Council	Town Councils	14.6%	£0.4k	14.6%	£0.4k	14.6%	£0.4k
117	Williton Parish Council	Town Councils	14.6%	£0.3k	14.6%	£0.4k	14.6%	£0.4k
Colleges								
11	Bridgwater College	Colleges	14.2%		14.3%		14.5%	
12	Richard Huish Sixth Form College	Colleges	13.0%	£20k	13.0%	£20k	13.0%	£20k
13	Somerset College Art&Tech	Colleges	13.0%	£40k	13.0%	£40k	13.0%	£40k
14	Strode College	Colleges	13.0%	£40k	13.0%	£40k	13.0%	£50k

Code	Employer	2010 Employer Pool	Minimum Level of Contributions 2011/12 % Pay	2011/12	2012/13 % Pay	2012/13	2013/14 % Pay	2013/14
15	Yeovil College	Colleges	13.0%	£40k	13.0%	£40k	13.0%	£40k
Other Employers								
120	Care Focus	Care Focus	10.7%		10.7%		10.7%	
121	Connaught Homes	Connaught Homes	12.7%		12.7%		12.7%	
105	Connect South West	Connect South West	12.8%	£80k	12.8%	£100k	12.8%	£120k
106	Exmoor National Park Authority	Exmoor National Park Authority	11.9%	£60k	11.9%	£60k	11.9%	£70k
51	Flourish Homes	Flourish Homes	13.9%	£30k	13.9%	£50k	13.9%	£60k
56	Homes In Sedgemoor	Homes in Sedgemoor	12.8%	£30k	12.8%	£30k	12.8%	£30k
90	Learning & Skills Network	Learning & Skills Network	12.6%	£180k	12.6%	£180k	12.6%	£180k
103	Learning South West	Learning South West	18.0%		18.0%		18.0%	
52	Magna West Somerset Housing	Magna West Somerset Housing	13.9%	£30k	13.9%	£30k	13.9%	£30k
118	May Gurney Environmental	May Gurney Environmental	14.1%		14.1%		14.1%	
89	The National Autistic Society	The National Autistic Society	14.8%	£6.6k	14.8%	£10.0k	14.8%	£13.5k
50	SHAL Housing Ltd	SHAL Housing Ltd	15.4%	£6.3k	15.4%	£8.3k	15.4%	£10.3k
5	Somerset Care Ltd	Somerset Care Ltd	17.0%	£70k	17.0%	£90k	17.0%	£120k
119	Somerset Leisure Ltd	Somerset Leisure Ltd	11.7%		11.7%		11.7%	
101	Somerset Rural Youth Project	Somerset Rural Youth Project	13.9%	£1.7k	13.9%	£1.9k	13.9%	£2.1k
102	South West Regional Assembly Board	South West Regional Assembly Board	12.5%	£90k	12.5%	£100k	12.5%	£120k
113	Tone Leisure	Tone Leisure	12.9%		12.9%		12.9%	
54	Yarlington Housing Group	Yarlington Housing Group	16.6%		17.2%		17.7%	
Employers with no active members								
93	Ammerdown College	Colleges						
107	Avon And Somerset Magistrates Courts Committee	Somerset County Council						
97	Bridgewater Burial Board	Somerset County Council						
88	Bridgwater Educ Action Zone	Somerset County Council						
25	Bristol Waterworks Co	Somerset County Council						
10	Cannington College	Colleges						
17	Charton Horethorne School	Somerset County Council						
18	Enmore Primary School	Somerset County Council						
92	Martock Parish Council	Town Councils						
116	North Petherton Town Council	Town Councils						
91	North Somerset Drainage Board	Somerset County Council						
999	Old Fund Pensioners (Pre 74)	Somerset County Council						
4	Pre 74	Somerset County Council						
58	Signpost Housing Association	Somerset County Council						
20	Somerset Redstone Trust	Somerset Redstone Trust						
104	South West Regional Development Agency	Somerset County Council						
55	Taunton Joint Burial	Town Councils						
96	Vaughan Lee House	Somerset County Council						
8	Wellington St John'S Primary School	Somerset County Council						
63	Wells Bb & Parish Council	Town Councils						
98	Wessex Group Valuation Tribunal	Somerset County Council						
68	Yeovil Joint Burial Committee	Town Councils						
Post Valuation Employers								
65	Berrow Town Council	Town Councils	17.9%		17.9%		17.9%	
201	DHI	DHI	15.0%		15.0%		15.0%	
200	Alabare	Alabare	15.0%		15.0%		15.0%	

Code	Employer	2010 Employer Pool	Minimum Level of Contributions 2011/12 % Pay	2011/12	2012/13 % Pay	2012/13	2013/14 % Pay	2013/14
Academies								
130	Holyrood Academy	Academies	15.1%		15.1%		15.1%	
131	Huish Episcopi Academy	Academies	15.1%		15.1%		15.1%	
133	Taunton Academy	Academies	15.1%		15.1%		15.1%	

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.

Appendix 6. LGPS Benefits

	LGPS 1997	LGPS 2008
General Features		
Type of Scheme	Final salary	
Relationship with S2P	Contracted-out	
Member Contributions	6% 5% for manual workers in scheme prior to 01/04/1998	Banded Contributions based on full time pay as at 1st April 2011 **Range** / **Cont Rate** £0 - £12,900 — 5.50% £12,901 - £15,100 — 5.80% £15,101 - £19,400 — 5.90% £19,401 - £32,400 — 6.50% £32,401 - £43,300 — 6.80% £43,301 - £81,100 — 7.20% More than £81,100 — 7.50% 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 30th 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 April1960 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.	

General Features	LGPS 1997	LGPS 2008
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 75th 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. **First Tier** - No reasonable prospect of alternative employment ever again then service enhanced by 100% of prospective service to age 65. **Second Tier** - 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. **Third Tier -** 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.

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

Benefit Accrual	Pension = 1/80th	Pension = 1/60th
	Lump Sum = 3/80th 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 = 1/160th	Spouse's Pension = 1/160th
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
	Pensioner = 5 year guarantee less pension paid	Pensioner = 10 year guarantee less pension paid

General Features	LGPS 1997	LGPS 2008
		(for death before age 75)
Dependants' Provision	Widow(er)s	Widow(er)s
	Registered civil partners	Registered civil partners
		Nominated cohabiting partners
Dependants' Pension	If membership > 3 months	1/160th x full prospective service to age 65
(Death in Service)	50% x notional ill health pension	
	Otherwise 1/160th x accrued membership	
Spouse's Short Term Pension	Active = 3 months x salary (increased to 6 months if dependent children)	None
	Deferred = none	
	Pensioner = 3 months x member's pension (increased to 6 months if dependent children)	
Children's Pensions	**Surviving Parent**	**Surviving Parent**
	1 child = 1/4 x notional pension	1 child = 1/2 x dependant's pension
	2+ children = 1/2 x notional pension divided by number of children	2+ children = 1 x dependant's pension divided by number of children
	Orphans	**Orphans**
	1 child = 1/3 x notional pension	1 child = 2/3 x dependant's pension
	2+ children = 2/3 x notional pension divided by number of children	2+ children = 1 1/3 x dependant's 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.	
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 Service Credit (if commenced AVCs prior to 13/11/2001)	
Added Years/Pension	Maximum purchase 6 2/3 years	Maximum purchase £5,000 extra pension (in

	LGPS 1997	LGPS 2008
General Features		
	Payable from next birthday to age 65 (contracts taken out before 01/10/2006 may have an earlier date than age 65)	multiples of £250).
Leaving the Scheme		
Benefits on Leaving	**Less than 3 months membership and no transfer in** Refund of contributions CETV Defer decision **More than 3 months membership or transfer in** CETV Defer Benefits until NRA	