# London Borough of Hammersmith & Fulham

Actuarial Valuation as at 31 March 2010 Draft Valuation Report

# Barnett Waddingham

Public Sector Consulting

21 January 2011

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Dear Jane

## Actuarial Valuation as at 31 March 2010

We are currently carrying out an actuarial valuation of the London Borough of Hammersmith & Fulham ("the Fund") as at 31 March 2010.

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 some initial results of the actuarial valuation of the Fund.

These initial results have been prepared further to our discussions at the Pre Valuation meeting in February 2010 and include some sensitivity analysis of the underlying assumptions.

This report is addressed to the London Borough of Hammersmith and Fulham as administering authority to the Fund. It is not intended to assist any user other than London Borough of Hammersmith and Fulham 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 a preliminary report such as this. A report will be issued in due course which will comply fully with GN9, in particular the requirements of section 3 relating to actuarial valuation reports.

These results take into account all of the changes in the Regulations governing the Local Government Pension Scheme ("the LGPS") since the previous valuation and the changes that came into effect on 1 April 2008.

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 and the results of that valuation were set out in the formal valuation report carried out by Tim Lunn FIA of Hewitt Bacon and Woodrow Limited, dated March 2008.
- 1.2.2 The results of the formal valuation indicated that the assets of the Fund represented 70% of the accrued liabilities of the Fund. The Total Required Contribution Rate was certified as 22.2% of payroll which assumed that the past service funding level would be restored over a period of 25 years.
- 1.2.3 A schedule of the certified contribution rates is included in Appendix 1.

#### **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 is likely that State Pension Age will be increased to age 66 sooner than previously anticipated which is likely to influence future retirement patterns.
- 1.3.3 A new independent pensions commission, led by Lord Hutton has also been created to investigate pension reform across the public sector. We anticipate some changes to the LGPS in future although at this stage it is difficult to assess what they might be.
- 1.3.4 Full current details of the current benefits and contribution structure are set out in Appendix 7.

## 2 Valuation Data

## 2.1 Data Sources

- 2.1.1 We have used the following items of data as provided by the London Borough of Hammersmith and Fulham. A summary of the data is set out in Appendix 3:
  - 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.

### 2.2 Assets

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



Assets at This Valuation	31 March 2010	
	£(000)	%
UK Equities	156,399	28%
Overseas Equities	156,877	28%
Corporate Bonds	-	-
Cash	4,982	1%
UK Gilts	73,713	13%
Overseas Bonds	-	-
Property	-	-
Other assets	-	-
Alternative Assets	164,860	30%
Total	556,831	100%

2.2.2 We estimate that the annual return on the Fund in market value terms for the 3 years to 31 March 2010 is estimated to be 6% 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 7.

## **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 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. This is the same method adopted at the previous valuation and is an appropriate method for a Fund which is open to new members.

## 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. Although in future pension benefits will 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

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 in Appendix 4.

## 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 and then adjusting by an inflation premium. The following table shows smoothed and spot bond yields at both valuation dates and the derivation of future implied retail price inflation derived from gilt yield differentials.

	March 2010		March 2	2007
	Smoothed	Spot	Smoothed	Spot
	% p.a.	% p.a.	% p.a.	% p.a.
Corporate bonds	5.6%	5.5%	5.4%	5.4%
Conventional gilt yields	4.5%	4.5%	4.7%	4.7%
Index linked gilt yields	0.8%	0.7%	1.3%	1.3%
Implied inflation	3.7%	3.9%	3.4%	3.4%
Inflation Premium	-0.3%	-0.5%		-0.2%
<b>RPI</b> assumption	3.5%	3.4%	3.1%	3.2%
CPI assumption	3.0%	2.9%		

## 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.
- 4.4.3 At this valuation we have adopted the same salary scales and salary inflation assumption. 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.

## 4.5 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. The investment strategy of the Fund is to invest the assets in a mix of equities, bonds and property.
- 4.5.4 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.
- 4.5.5 It is however possible to model future returns from equities by deriving an "equity risk premium". This is effectively the expected return to be earned from equities over and above the returns available from bonds in return for taking on the additional risk of investing in equities rather than bonds.
- 4.5.6 The following table sets out the derivation of the equity risk premium and the expected return from equities at the current and previous valuation date.

Smoothed Equity Returns	March 2010	March 2007
	% p.a.	% p.a.
Equity Risk Premium		
Net equity yield	3.3%	2.8%
Inflation	3.5%	3.1%
plus assumed real capital return	0.5%	0.9%
Equity Return	7.3%	6.9%
Equity Risk Premium	2.8%	2.2%

4.5.7 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.

- 4.5.8 Accordingly we have assumed that the return from property will be the same as corporate bonds and that returns from other alternative asset classes is the same as the expected return from equities.
- 4.5.9 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.
- 4.5.10 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.
- 4.5.11 Finally to accommodate any extreme market conditions at the valuation date the resulting real discount rate is constrained to 4% per annum.

Financial Assumptions	Mar	ch 2010	Marc	h 2007
	% p.a.	Real % p.a.	% p.a.	Real % p.a.
Investment Return				
Equities/absolute return funds	7.3%	3.8%		
Gilts	4.5%	1.0%		
Bonds & Property	5.6%	2.1%		
Risk Neutral Discount Rate	6.6%	3.1%		
Risk Adjusted Discount Rate	6.7%	3.2%	6.5%	3.3%
Pay Increases	5.0%	1.5%	4.7%	1.5%
Price Inflation	3.5%	-	3.2%	
Pension Increases	3.0%	(0.5%)	3.2%	

4.5.12 In summary therefore we have adopted the following assumptions.

## 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	5.9%	6.5%	(0.5%)	
Estimated Pay Increases	4.7%	4.7%	(0.0%)	
Price Inflation/Pension Increases	2.9%	3.2%	(0.3%)	

- 4.6.2 The principal conclusions are:
  - Investment returns were less than expected.
  - Pay increases were slightly less than expected.
  - Pension increases were 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 during the intervaluation period.

## **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	1,661	1,023.3	62%
Deaths in Service	11	11	2%
Retirements			
III health	12	34.7	(65%)
Age	450	450	-
Voluntary	23		
Redundancy	228		
Efficiency	3		
Total	716	485	48%

- 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 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 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.

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Pensioner Deaths	Pensioners	Dependants	Total
ByNumber			
Actual	287	107	394
Assumed	214	86	300
% Difference	34%	25%	31%
By Amount of Pension	£	£	£
Actual	1,613,702	256,918	1,870,620
Assumed	1,227,746	277,762	1,505,508
% Difference	31%	(8%)	24%

5.2.3 The number of pensioners dying during the intervaluation period was higher than expected.

### 5.3 Pensioner Mortality Assumptions

- 5.3.1 Overall the mortality experience over the intervaluation period had a positive financial impact in that more pensioners died compared to the assumptions adopted at the previous valuation.
- 5.3.2 National surveys indicate that the pace of improvement in longevity continues. However, we believe there is a case to amend the assumptions adopted at this valuation to allow for lighter mortality longer term but to amend current assumptions to better reflect current mortality levels.
- 5.3.3 We have therefore completed calculations assuming all members will follow the mortality experience of a table which is based on the mortality assumptions underlying the 90% S1PA Heavy tables allowing for medium cohort projection, with a minimum 1% improvement.

#### 5.4 Retirement Ages – Active Members

- 5.4.1 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.
- 5.4.2 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.
- 5.4.3 There are existing plans in place to increase State Pension Age albeit very slowly. The new Government have however indicated that these changes are likely to be brought forward which is likely to mean that active members in future are likely to retire later than they have in the past.
- 5.4.4 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 they would be entitled to retire and receive unreduced benefits.

## 6 Initial Valuation Results

## 6.1 Past Service Position

- 6.1.1 The following table sets out the past service position for the Fund as a whole. We show the published results at the previous valuation and then track the past service position and funding level allowing for
  - Intervaluation experience changes in market conditions, actual inflation and investment returns etc
  - Impact of future pension increases being in line with CPI
  - Effect of assuming active members retire 1 year later than previously assumed
  - Impact of 2 year pay freeze
  - Impact of allowing for revised mortality and other statistical assumptions

Description	2007 Valuation	2010 Valuation	
Valuation Date	31 March 2007	31 March 2010	
Demographic Assumptions	2007	2007	
Mortality	125% PNA00 MC Min 1%/0.5%	S1PA_H MC U2010 Min 1%	
Commutation	50%	90%	
Financial Assumptions	% p.a.	% p.a.	
Price Increases	3.2%	3.5%	
Pension Increases	3.2%	3.0%	
Salary Increases	4.7%	5.5%	
Discount Rate	6.5%	6.7%	
Past Service Funding Position	£(000)	£(000)	
Asset Value	457,100	534,255	
Past Service Liabilities			
Active Members	290,800	248,701	
Deferred Pensioners	120,500	128,702	
Pensioners	241,900	340,452	
Value of Scheme Liabilities	653,200	717,855	
Surplus (Deficit)	(196,100)	(183,600)	
Funding Level	70%	74%	

- 6.1.2 During the intervaluation period the funding level has decreased from 70% to 74% at the current valuation date.
- 6.1.3 The funding level then increased when making an allowance for pension increases being in line with CPI, active members retiring a year later and the proposed 2 year "pay freeze".

- 6.1.4 The funding level also increased slightly once allowance is made for the changes in mortality assumptions in addition to the change in the statistical basis which allows for more leavers and fewer ill health retirements than at the 2007 valuation.
- 6.1.5 We have also made a change to the assumed tier level for ill health benefits to follow the experience of the past three years.
- 6.1.6 The effects of the changes are shown in the next section.

### 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 table.

Change in Past Service Position				
	£(000)	£(000)	£(000)	
Surplus(Deficit) at 31 March 2007			(196,100)	
Benefits Accrued	(67,762)			
Settlements/Curtailments	(10,295)			
Contributions Paid	93,604			
Deficit Funded (Use of Surplus)		15,547		
Interest Cost of Liabilities	(133,065)			
Actual Return on Assets	68,170			
Change in Market Conditions	(5,381)			
Financial Gain(Loss)		(70,276)		
Salary Increases	173			
Pension Increases	1,382			
Membership Changes/ Mortality	297			
Experience		1,852		
Allow ance for Inf Prem/CPI/Ret age/Pay	54,880			
Updated statistics/mortality	10,497			
Surplus(Deficit) at 31 March 2010			(183,600)	

## 6.3 Future Service Contribution Rates

- 6.3.1 The following table sets out the change in the costs of benefits accruing in future.
- 6.3.2 We show the contribution rates from the previous valuation and then track the required contribution rates allowing for the same changes outlined above.

Valuation Date	31 March 2007	31 March 2010
Demographic Assumptions	2007	2007
Mortality	125% PNA00 MC Min 1%/0.5%	S1PA_H MC U2010 Min 1%
Commutation	50%	90%
Financial Assumptions	% p.a.	% p.a.
Price Increases	3.2%	3.5%
Pension Increases	3.2%	3.0%
Salary Increases	4.7%	5.5%
Discount Rate	6.5%	6.7%
Future Service Contribution Rates	% of payroll	% of payroll
Total	20.5%	19.9%
Employee	6.6%	6.8%
Employer	13.9%	13.1%

- 6.3.3 The results show that the impact of the change in market conditions and change in membership profile during the intervaluation period.
- 6.3.4 The contribution rate has decreased when we make an allowance for pension increases being in line with CPI, active members retiring a year later, allowing for the short term pay freeze and the revised mortality and statistical tables.

## 6.4 Deficit Recovery Plan

- 6.4.1 At the previous valuation the deficit recovery plan was to fund the deficit over a 25 year period.
- 6.4.2 In the following table we set possible deficit contributions expressed as a percentage of payroll together with resulting total contribution rates assuming deficit recovery period 25 years.

Description	2007 Valuation	2010 Valuation
	0.2% of payroll	-0.8% of payroll
Valuation Date	31 March 2007	31 March 2010
Demographic Assumptions	2007	2007
Mortality	125% PNA00 MC Min 1%/0.5%	S1PA_H MC U2010 Min 1%
Commutation	50%	90%
Financial Assumptions	% p.a.	% p.a.
Price Increases	3.2%	3.5%
Pension Increases	3.2%	3.0%
Salary Increases	4.7%	5.5%
Discount Rate	6.5%	6.7%
Future Service Contribution Rates	% of payroll	% of payroll
Employer	13.9%	13.1%
Deficit Contribution	% of payroll	% of payroll
25 years	8.3%	8.3%
Total Employer Contribution	% of payroll	% of payroll
25 years	22.2%	21.4%

## 7 Comments and Conclusions

- 7.1.1 The funding level has increased once we have allowed for changes to the fund since the 2007 valuation.
- 7.1.2 This is due to a combination of factors but primarily due to lower than assumed investment returns.
- 7.1.3 However these are offset by
  - Future pension increases being linked to CPI
  - Later retirement age assumptions
  - Short term pay freeze
- 7.1.4 The revised mortality and demographic assumptions to better reflect current experience does not change the overall results in a material way.
- 7.1.5 We await the Hutton review of Public Sector schemes and will add in our post valution events section when details are known.
- 7.1.6 This report remains in draft until such changes are known and will not be signed off until required as of 31 March 2011 to allow for future changes.

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Graeme D Muir FFA

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Alison Hamilton FFA

## Appendix 1. 2007 Contribution Schedule

Below we have set out the Statement of Certified Contributions included in the 2007 valuation report under Regulation 77 for the period 1 April 2008 to 31 March 2011.

		Future Service Contribution Rate					
Employer		% of payroll					
Code	Employing Authority	1 April 2008	1 April 2009	1 April 2010			
80	London Borough of Hammersmith and Fulham	22.5%	23.6%	24.7%			
81	Mortlake Crematorium Board	23.2%	25.1%	27.0%			
82	Blythe Neighbourhood Council	23.0%	24.3%	25.6%			
83	Family Mosaic Housing	22.6%	23.5%	24.4%			
84	Hammersmith and Fulham Community Law Centre	23.0%	24.3%	25.6%			
88	Urban Partnership Group	23.0%	24.3%	25.6%			
89	London Oratory School	15.0%	15.0%	15.0%			
90	Disabilities Trust	19.0%	19.0%	19.0%			
91	Medequip Assistive Technology Ltd	26.2%	-	-			
92	H&F Homes	15.0%	15.0%	15.0%			
93	Greenwich Leisure Ltd	14.2%	14.2%	14.2%			
94	Glencross Cleaning Ltd	23.5%	23.5%	-			
95	Inspace Partnerships Ltd - Fulham Repairs	20.8%	20.8%	-			
96	Inspace Partnerships Ltd - Voids Repairs	20.4%	20.4%	-			
97	Burlington Danes Academy	14.0%	14.0%	14.0%			
98	H & F Bridge Partnership	17.1%	17.1%	17.1%			

## Appendix 2. Valuation Methods

## 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. In the valuation we consider the benefits accruing in the year following the valuation date. The value of 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.

## **Overall Result**

Any past service surplus or deficiency if significant can be used to offset against the contribution rate payable by the employing bodies over the period following the valuation date.

## Name of Measure

The method described above is known as the Projected Unit Method of valuation.

## Valuation of Assets

Assets have been valued at a 6 month smoothed market value straddling the valuation date. Where additional contributions to fund previous early retirement costs are due to the Fund at the valuation date we have included these as an asset of the Fund.

## Appendix 3. Valuation Data

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

Active Members			Actual Pens	sionable Pay	Ave	rage		
	Number		£ ((	000)		£		
Full Time	2010	2007	2010	2007	2010	2007		
Males	1,339	1,879	46,764	52,706	34,924	28,050		
Females	1,164	2,883	40,224	56,283	34,556	19,522		
Part Time								
Males	244	-	3,358	-	13,760	-		
Females	1,378	-	17,358	-	12,597	-		
Total	4,125	4,762	107,703	108,989	26,110	22,887		

Pensioners			Annual F	Pensions	Ave	rage
	Nun	nber	£ ((	000)		£
	2010	2007	2010	2007	2010	2007
Males	1,399	1,456	11,314	9,917	8,087	6,811
Females	1,626	1,644	7,578	6,761	4,660	4,112
Dependants	589	564	1,646	1,217	2,795	2,158
Total	3,614	3,664	20,538	17,895	5,683	4,884

Deferred Pensioners (incl "undecideds")			Annual F	Pensions	Average			
Number			£ (0	000)	£			
	2010	2007	2010	2007	2010	2007		
Males	2,380	1,648	5,455	4,188	2,292	2,541		
Females	3,652	2,338	5,864	4,472	1,606	1,913		
Total	tal 6,032 3,986		11,319	8,660	1,877 2,173			

#### Notes

2007 valuation results were not broken down by full time or part time status.

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 include pension increases up to and including the PI Order.

Pensionable pay is actual earnings.

A summary of the assets held by the fund at the valuation date and the revenue account for the 3 years preceding the valuation date is as shown below.

Assets at This	31 March 2010	
Valuation	£(000)	%
UK Equities	156,399	28%
Overseas Equities	156,877	28%
Corporate Bonds	-	-
Cash	4,982	1%
UK Gilts	73,713	13%
Overseas Bonds	-	-
Property	-	-
Other assets	-	-
Alternative Assets	164,860	30%
Total	556,831	100%

Revenue	Year to	March 2010	March 2009	March 2008	TOTAL
Accounts		£ (000)	£ (000)	£ (000)	£ (000)
EXPENDITURE	Retirement Pensions	21,752	19,828	18,647	60,227
	Retirement Lump Su	6,146	4,281	4,898	15,325
	Death Benefits	855	518	298	1,671
	Leavers benefits	4,987	3,353	4,379	12,719
	Admin/Investment E	947	970	995	2,912
	Other Expenditure	-	-	-	-
		34,687	28,950	29,217	92,854
TOTAL					
INCOME	Employees Ctbns	7,576	7,527	6,713	21,816
	Employers Ctbns	24,425	23,577	23,786	71,788
	Transfer Values	3,267	1,961	2,916	8,144
	Investment Income	5,167	9,106	8,291	22,564
	Other Income	29	35	31	95
TOTAL		40,464	42,206	41,737	124,407
Fund Value		£ (000)	£ (000)	£ (000)	£ (000)
Assets at Start of	Year	420,871	460,445	457,070	457,070
Cashflow		5,777	13,256	12,520	31,553
Change in value		127,664	(52,828)	(9,141)	65,695
Assets at End of	Year	554,312	420,873	460,449	554,312
Annual Returns	· · · · · · · · · · · · · · · · · · ·				
Approx Rate of R	eturn	30.1%	-11.3%	-2.0%	13.1%

## **Appendix 4.** 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 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 as shown on the previous charts.

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. The difference between these in principle is simply that payments from index-linked gilts are linked to inflation (RPI) whereas fixed-interest gilts pay a fixed amount, as you would expect. If you had two otherwise identical gilts then the prices would give an indication of what the market expects future inflation to be.

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) would rather not have to borrow money - it will be a while before we get anywhere near those days mind you – and so there is no unrestricted supply, 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 pretty much "forced holders" of gilts to meet various solvency requirements. Accordingly, the pricing of gilts is not perfect – but it's the best we have.

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.

# Barnett Waddingham

Public Sector Consulting



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).



As we see the absolute level of inflation premium has been around 1.5% in absolute terms but on a declining trend and to about 70% in relative terms but on an increasing trend.

Of course since 1997, control of inflation has been the job of the Bank of England rather than the Treasury. This data is very limited but it does tend to suggest that there is a case for adopting a future RPI inflation assumption slightly below the market implied rate whilst still retaining an element of prudence. We have therefore adopted an inflation premium of 0.25%.

#### **Pension Increases**

The Retail Price Index has long been the established measure of inflation in the UK. It measures the change in prices of 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.

#### **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.

It is generally accepted however that the expected future return from investing in equities should exceed that available from investing in gilts. This extra expected return is known as the equity risk premium. By comparing yields from gilts and equities it is possible to derive the equity risk premium.

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 the 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 which has averaged out at around 2 per cent 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 0.5% per annum.

The derivation of the equity risk premium and the assumption regarding future equity returns were therefore as follows:-

Smoothed Equity Returns	March 2010	March 2007
	% p.a.	% p.a.
Equity Risk Premium		
Net equity yield	3.3%	2.8%
Inflation	3.5%	3.1%
plus assumed real capital return	0.5%	0.9%
Equity Return	7.3%	6.9%
Equity Risk Premium	2.8%	2.2%

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 property will be the same as corporate bonds and that and 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%.

Financial Assumptions	Mar	ch 2010	March 2007		
	% p.a.	Real % p.a.	% p.a.	Real % p.a.	
Investment Return					
Equities/absolute return funds	7.3%	3.8%			
Gilts	4.5%	1.0%			
Bonds & Property	5.6%	2.1%			
Risk Neutral Discount Rate	6.6%	3.1%			
Risk Adjusted Discount Rate	6.7%	3.2%	6.5%	3.3%	
Pay Increases	5.0%	1.5%	4.7%	1.5%	
Price Inflation	3.5%	-	3.2%		
Pension Increases	3.0%	(0.5%)	3.2%		

In summary therefore we have adopted the following assumptions.

#### **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. The mortality assumptions are based on national mortality tables.

Sample rates are shown in the following tables: -

Incidence per 1000 active members per annum									Salary	Scales			
		Mal	es			Fem	ales						
	Death	IIIHea	lth	Withdraw al	Death	III Hea	alth	Withdrawal	Mal	es	Females		
Age		FT	PT			FT	РТ		FT	PT	FT	PT	
20	0.5	0.3	0.0	0.0	400.0	0.1	0.0	0.1	400.0	100.0	100.0	100.0	
25	0.4	0.2	0.0	0.1	360.0	0.1	0.1	0.2	360.0	122.8	100.0	114.2	
30	0.3	0.2	0.1	0.2	264.0	0.2	0.2	0.5	264.0	145.5	100.0	125.8	
35	0.5	0.3	0.1	0.4	184.0	0.3	0.3	0.8	184.0	166.3	100.0	133.6	
40	0.9	0.5	0.3	0.8	108.0	0.3	0.4	1.1	108.0	183.1	100.0	136.6	
45	1.3	0.7	0.4	1.3	48.0	0.4	0.6	1.7	48.0	194.4	100.0	136.6	
50	2.5	1.3	0.8	2.4	-	0.7	1.1	3.3	-	198.8	100.0	136.6	
55	4.3	2.2	1.8	5.3	-	1.1	2.1	6.3	-	198.8	100.0	136.6	
60	6.9	3.5	3.7	11.1	-	1.6	4.2	12.7	-	198.8	100.0	136.6	
64	11.1	5.6	6.6	19.7	-	2.0	5.8	17.3	-	198.8	100.0	136.6	

Other assumptions						
Age Retirements	It is assumed that active members will retire at age 60 or when they would first satisfy the rule of if later, no later than 65. We have also considered active mebers retiring a year later.					
Mortality	All .	90% S1PA Heavy tables allow ing for medium cohort projection, with a minimum 1% improvement				
	III Health Retirement	As above but with 200% multiplier				
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 members at retirement will commute pension to provide a lump sum of 50% $^*$ (3/80ths lump sum + HMRC maximum lump sum) at a rate of £12 of lump sum for £1 of pension.					
III health tiers	It is assumed that 50% of service and 50% will qua	i ill health retirements will be eligible for benefits based on full prospective lify for a service enhancement of 25% of prospective service.				

## Appendix 5. Individual Employer Data as at 31 March 2010

		Active Me	mbers		Pensione	rs		Deferred	Pensioners	
Employer	Code	Number	Actual Pay £ 000's	Average £	Number	Annual Pensions £ 000's	Average £	Number	Annual Pensions £ 000's	Average £
London Borough of Hammersmith and Fulham	80	3,121	83,239	26,671	3,945	22,816	5,784	5,717	30,705	5,371
Mortlake Crematorium Board	81	11	207	18,843	5	31	6,288	4	7	1,630
Blythe Neighbourhood Council	82	-	-	-	2	2	846	1	4	3,748
Family Mosaic Housing	83	39	717	18,379	8	98	12,283	15	192	12,811
Hammersmith and Fulham Community Law Centre	84	3	115	38,333	2	12	6,123	10	144	14,428
Hammersmith and Fulham Police Consultative Group	85	-	-	-	1	13	12,577	-	0	1
ROOM the National Council	86	-	-	-	2	13	6,436	2	3	1,460
Peter Pan Trust	87	-	-	-	-	-	-	5	85	17,059
Urban Partnership Group	88	8	274	34,194	1	3	2,549	9	91	10,158
London Oratory School	89	27	655	24,247	-	-	-	16	56	3,522
Disabilities Trust	90	2	24	12,243	-	-	-	11	29	2,620
Medequip Assistive Technology Ltd	91	2	54	27,035	-	-	-	1	0	426
H&F Homes	92	297	9,423	31,727	66	717	10,857	84	932	11,099
Greenwich Leisure Ltd	93	-	-	-	1	1	1,303	13	102	7,822
Glencross Cleaning Ltd	94	3	17	5,584	-	-	-	3	3	1,075
Inspace Partnerships Ltd - Fulham Repairs	95	8	166	20,777	7	43	6,090	10	157	15,657
Inspace Partnerships Ltd - Voids Repairs	96	5	139	27,788	2	9	4,647	5	54	10,741
Burlington Danes Academy	97	36	740	20,569	3	4	1,272	19	35	1,832
H & F Bridge Partnership	98	60	2,538	42,297	10	144	14,411	29	541	18,652
P H Jones Ltd	99	1	26	26,467	-	-	-	-	-	-
Status 8 - no liability	199	-	-	-	-	-	-	43	15	344
Unknow n employer	311	-	-	-	1	22	22,329	-	0	1
Irish Cultural Centre	830	1	22	22,187	-	-	-	1	16	16,449
Kier Support Services Ltd	831	22	668	30,384	1	21	20,921	1	12	11,981
Quadron Services Ltd	832	48	1,155	24,057	1	13	12,959	15	170	11,318
Serco	833	141	3,576	25,362	6	22	3,617	9	18	2,043
Tendis	834	3	104	34,730	-	-	-	1	-	-
Turners Cleaning	835	114	951	8,338	3	13	4,423	4	4	883
FM Conw ay	836	16	555	34,674	1	4	3,550	-	0	1
Family Mosaic - Supporting People contract	837	5	137	27,361	-	-	-	-	-	-
Receiving Unfunded pensions	838	-	-	-	162	416	2,570	-	0	162
Receiving Teachers' pensions	839	-	-	-	37	136	3,674	-	0	37
Kier - Non Responsive Repairs contract	840	1	27	26,742	-	-	-	-	-	-
Thames Reach	841	1	30	29,570	-	-	-	-	-	-
Eden Food Services	842	139	1,716	12,347	2	1	704	4	8	1,933
Financial Data Management Ltd	843	2	73	36,331	-	-	-	-	-	-
EC Harris LLP	844	7	307	43,892	-	-	-	-	-	-
Crime Reduction Initiatives (CRI)	845	2	48	23,960	-	-	-	-	-	-
Total		4,125	107,703	26,110	4,269	24,554	5,752	6,032	33,383	5,534

## Appendix 6. Employer Intervaluation Experience

		III Health Retirements			Early Leavers			Salary Increas	
Employer	Code	Actual	Expected	Act/Exp	Actual	Expected Act/Exp		Act/Exp	
London Borough of Hammersmith and Fulham	80	10	24	41%	1,414	858	165%	99%	
Mortlake Crematorium Board	81	1	0	351%	-	1	-	98%	
Blythe Neighbourhood Council	82	-	-	-	-	-	-	-	
Family Mosaic Housing	83	-	0	-	8	8	105%	99%	
Hammersmith and Fulham Community Law	84	-	0	-	1	1	153%	98%	
Centre Hammersmith and Fulham Police Consultative Group	85	-	-	-	-	-	-	-	
ROOM the National Council	86	-	-	-	-	-	-	-	
Peter Pan Trust	87	-	-	-	-	-	-	-	
Urban Partnership Group	88	-	0	-	3	2	184%	99%	
London Oratory School	89	-	0	-	12	5	253%	99%	
Disabilities Trust	90	-	0	-	-	1	-	99%	
Medequip Assistive Technology Ltd	91	-	0	-	-	0	-	115%	
H&F Homes	92	1	3	31%	65	49	134%	98%	
Greenwich Leisure Ltd	93	-	0	-	1	0	1540%	-	
Glencross Cleaning Ltd	94	-	0	-	1	0	316%	95%	
Inspace Partnerships Ltd - Fulham Repairs	95	-	0	-	5	1	429%	92%	
Inspace Partnerships Ltd - Voids Repairs	96	-	0	-	2	0	509%	97%	
Burlington Danes Academy	97	-	0	-	34	6	603%	100%	
H & F Bridge Partnership	98	-	0	-	27	16	169%	98%	
P H Jones Ltd	99	-	0	-	-	0	-	95%	
Status 8 - no liability	199	-	-	-	-	-	-	-	
Unknow n employer	311	-	-	-	1	-	-	-	
Irish Cultural Centre	830	-	0	-	1	0	397%	-	
Kier Support Services Ltd	831	-	0	-	2	2	95%	96%	
Quadron Services Ltd	832	-	1	-	9	3	297%	100%	
Serco	833	-	1	-	11	24	46%	100%	
Tendis	834	-	0	-	1	1	111%	97%	
Turners Cleaning	835	-	1	-	5	18	28%	100%	
FM Conw ay	836	-	0	-	-	2	-	100%	
Family Mosaic - Supporting People contract	837	-	0	-	-	1	-	97%	
Receiving Unfunded pensions	838	-	-	-	-	-	-	-	
Receiving Teachers' pensions	839	-	-	-	-	-	-	-	
Kier - Non Responsive Repairs contract	840	-	0	-	-	0	-	-	
Thames Reach	841	-	0	-	-	0	-	-	
Eden Food Services	842	-	1	-	5	25	20%	104%	
Financial Data Management Ltd	843	-	0	-	-	0	-	95%	
EC Harris LLP	844	-	0	-	1	(0)	-1544%	96%	
Crime Reduction Initiatives (CRI)	845	-	0	-	-	0	-	100%	
Total		12	35	35%	1,609	1,023	157%	99%	

## Appendix 7. Employer Results

				Deficit recovery	Contribution rate	Rate 2010/11	Proposed Certified Rates % payroll			Certified Rates Monetary £		
Code E	Employer	Future Service Rate	Recovery Period									
							2011/12	2011/12	2011/12	2011/12	2011/12	2011/12
80	London Borough of Hammersmith and Fulham	13.4%	25 years	11.3%	24.7%	24.7%	24.7%	24.7%	24.7%	9,395,000	9,395,000	9,395,000
81	Mortlake Crematorium Board	16.9%	25 years	7.1%	24.0%	27.0%	24.0%	24.0%	24.0%	14,700	14,700	14,700
82	Blythe Neighbourhood Council	13.8%	25 years	11.8%	25.6%	25.6%	25.6%	25.6%	25.6%	32,300	32,300	32,300
83	Family Mosaic Housing	15.2%	25 years	3.8%	19.0%	24.4%	19.0%	19.0%	19.0%	27,250	27,250	27,250
84	Hammersmith and Fulham Community Law	15.5%	25 years	3.5%	19.0%	25.6%	19.0%	19.0%	19.0%	4,000	4,000	4,000
88	Urban Partnership Group	13.8%	25 years	11.8%	25.6%	25.6%	25.6%	25.6%	25.6%	32,300	32,300	32,300
89	London Oratory School	14.3%	25 years	0.7%	15.0%	15.0%	15.0%	15.0%	15.0%	4,600	4,600	4,600
90	Disabilities Trust	15.1%	7 years	3.9%	19.0%	19.0%	19.0%	19.0%	19.0%	950	950	950
91	Medequip Assistive Technology Ltd	17.3%	1 years	1.7%	19.0%	0.0%	19.0%	19.0%	19.0%	900	900	900
92	H&F Homes	14.2%	25 years	0.8%	15.0%	15.0%	15.0%	15.0%	15.0%	75,000	75,000	75,000
93	Greenwich Leisure Ltd	15.0%	10 years		15.0%	14.2%	15.0%	15.0%	15.0%	-	-	-
94	Glencross Cleaning Ltd	18.9%	2 years	4.6%	23.5%	0.0%	23.5%	23.5%	23.5%	750	750	750
95	Inspace Partnerships Ltd - Fulham Repairs	15.9%	2 years	4.9%	20.8%	0.0%	20.8%	20.8%	20.8%	8,150	8,150	8,150
96	Inspace Partnerships Ltd - Voids Repairs	17.3%	2 years	3.1%	20.4%	0.0%	20.4%	20.4%	20.4%	4,300	4,300	4,300
97	Burlington Danes Academy	13.9%	25 years	0.1%	14.0%	14.0%	14.0%	14.0%	14.0%	750	750	750
98	H & F Bridge Partnership	12.6%	8 years	4.5%	17.1%	17.1%	17.1%	17.1%	17.1%	115,000	115,000	115,000

#### New Employers

							Proposed Certified Rates			Certified Rates Monetary		
		Future Service Rate	Recovery Period	Deficit recovery	Contribution rate	Rate 2010/11	% payroll			£		
Code	Employer						2011/12	2011/12	2011/12	2011/12	2011/12	2011/12
99	P H Jones Ltd	17.2%	5 years	3.5%	20.7%	20.7%	20.7%	20.7%	20.7%	950	950	950
830	Irish Cultural Centre	12.2%	25 years	9.1%	21.3%	28.5%	28.5%	28.5%	28.5%	3,600	3,600	3,600
831	Kier Support Services Ltd	14.6%	5 years	6.9%	21.5%	21.5%	21.5%	21.5%	21.5%	46,050	46,100	46,100
832	Quadron Services Ltd	16.6%	7 years	5.7%	22.3%	22.3%	22.3%	22.3%	22.3%	65,000	65,000	65,000
833	Serco	13.8%	7 years	5.2%	19.0%	22.0%	19.0%	19.0%	19.0%	185,000	185,000	185,000
834	Tendis	11.0%	25 years	10.3%	21.3%	24.9%	21.3%	21.3%	21.3%	10,750	10,750	10,750
835	Turners Cleaning	16.0%	3 years	3.0%	19.0%	18.3%	18.5%	18.8%	19.0%	23,900	26,200	28,500
836	FM Conw ay	15.8%	5 years	4.1%	19.9%	19.2%	19.4%	19.7%	19.9%	20,100	21,400	22,750
837	Family Mosaic - Supporting People contract	13.3%	3 years	1.8%	15.1%	14.9%	15.1%	15.1%	15.1%	2,450	2,450	2,450
840	Kier - Non Responsive Repairs contract	8.7%	3 years	5.2%	13.9%	13.9%	13.9%	13.9%	13.9%	1,400	1,400	1,400
841	Thames Reach	16.2%	3 years	4.5%	20.7%	20.7%	20.7%	20.7%	20.7%	1,350	1,350	1,350
842	Eden Food Services	16.0%	3 years	2.9%	18.9%	18.4%	18.6%	18.7%	18.9%	45,000	45,000	50,000
843	Financial Data Management Ltd	11.9%	3 years	4.8%	16.7%	14.2%	15.0%	15.9%	16.7%	2,300	2,900	3,500
844	EC Harris LLP	14.6%	25 years	2.7%	17.3%	17.3%	17.3%	17.3%	17.3%	8,300	8,300	8,300
845	Crime Reduction Initiatives (CRI)	14.5%	25 years	2.2%	16.7%	16.7%	16.7%	16.7%	16.7%	1,050	1,050	1,050

London Borough of Hammersmith & Fulham – Actuarial Valuations as at 31 March 2010

## Appendix 8. LGPS Benefits

LGPS Benefits							
General Features							
Type of Scheme	Final salary						
Relationship with S2P	Contracted-out						
Member Contributions	Banded Contributions based on full time pay as at 1 <sup>st</sup> April						
	Range Cont Rate						
	£0 - £12,000	5.50%					
	£12,001 - £14,000	5.80%					
	£14,001 - £18,000	5.90%					
	£18,001 - £30,000	6.50%					
	£30,001 - £40,000	6.80%					
	£40,001 - £75,000	7.20%					
	£75,000 and above	7.50%					
	Bands to be increased annu	ally in line with the Pension (Increase) Act 1971.					
	Transitional protection for 01/04/2011.	manual and craft workers (old 5% members) until					
Benefit Accrual	Pension = $1/60^{th}$						
	Lump Sum = By commutatio	n 12:1 up to a maximum of 25% of lifetime allowance					
	Spouse's Pension = 1/160 <sup>th</sup>						
Final Pay	Best of last 3 years pensionable pay.						
Pensionable Pay	Normal salary plus any shift allowance, bonuses, contractual overtime, Maternity Pay, Adoption Pay and any other taxable benefit specified as being pensionable.						
Retirement Benefits							
Normal Retiring Age	Age 65						
Early Retirement	From age 55 (employer cons	sent required if below age 60)					

LGPS Benefits						
Flexible Retirement	From age 55 (employer consent required)					
	- 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					
III Health Retirement	From any age					
	Based on an opinion from an independent specially qualified doctor, must be satisfied that the member is permanently unable to do their own job and that they have a reduced likelihood of being capable of obtaining gainful employment after they leave.					
	<b>Tier 1</b> – no reasonable prospect of being capable of obtaining gainful employment before age 65, membership enhanced by 100% of prospective service to age 65.					
	<b>Tier 2</b> – unlikely to be capable of obtaining gainful employment within 3 years of leaving, but maybe capable of doing so before age 65, membership enhanced by 25% of prospective service to age 65.					
	<b>Tier 3</b> – likely to be capable of obtaining gainful employment within 3 years of leaving, benefits are based on membership at date of leaving. Payment will be stopped after 3 years, or earlier, if member is in gainful employment or becomes capable of undertaking such employment.					
Death and Survivor Benefits						
Lump Sum Death	Active = 3 x Final Pay					
Denent	Deferred = 5 x Current value of deferred annual pension					
	Pensioner = 10 year guarantee less pension paid (for death before age 75)					
Dependants' Provision	Widow(er)s					
	Registered civil partners					
	Nominated cohabiting partners					
Dependants' Pension	1/160th x full prospective service to age 65 x Final Pay					

(Death in Service)

LGPS Benefits							
Children's Pensions	Surviving Parent						
	1 child = 1/320th x full prospective service to age 65 x Final Pay						
	2+ children = 1/160th x full prospective service to age 65 x Final Pay (divided by number of children)						
	No Surviving Parent						
	1 child = 1/240th x full prospective service to age 65 x Final Pay						
	2+ children = 1/120th x full prospective service to age 65 x Final Pay (divided by number of children)						
Increasing Benefits							
In-House AVCs	Maximum contributions – 50% of taxable earnings						
	Options available:						
	- Open market annuity						
	- LGPS Top Up Pension						
	<ul> <li>Tax Free Lump Sum (100% of fund up to max of 25% of Lifetime Allowance)</li> </ul>						
	- LGPS Service Credit (if commenced AVCs prior to 13/11/2001)						
Additional Regular Contributions (ARCs)	Maximum purchase £5,000 extra pension (in multiples of £250).						
Leaving the Scheme							
Options	Less than 3 months membership and no transfer in						
	- Refund of contributions						
	- Transfer to a new pension arrangement						
	- Defer decision						

#### More than 3 months membership or transfer in

- Transfer to a new pension arrangement
- Defer Benefits until NRA

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#### LGPS Benefits

#### Members who joined the LGPS before 1 April 2008

Benefits	Membership built up to 31 March 2008, member will receive a pension based on $1/80^{\text{th}}$ x membership x Final Pay plus an automatic lump sum of 3 times their pension.
Early Payment - Reduction to Benefits (Rule of 85)	For members of the LGPS on 30 September 2006, some or all of their benefits paid early could be protected from reduction under what is called the Rule of 85.
	The Rule of 85 is satisfied if their age at the date they draw their benefits plus their scheme membership (each in whole years) add up to 85 or more.
	If they <b>could not satisfy the Rule of 85 by the time they are 65</b> , then all of their benefits are reduced, if they choose to retire before age 65.
	If they <b>will be age 60 or over by 31 March 2016</b> and choose to retire before age 65, then <b>provided they satisfy the Rule of 85 when they start to draw their pension</b> , the benefits they build up to 31 March 2016 will not be reduced.
	If they <b>will be under age 60 by 31 March 2016</b> and choose to retire before age 65, then <b>provided they satisfy the Rule of 85 when they start to draw their pension</b> , the benefits they have built up to 31 March 2008 will not be reduced. Also, if they will be aged 60 between 1 April 2016 and 31 March 2020 and meet the Rule of 85 by 31 March 2020, some or all of the benefits that they have built up between 1 April 2008 and 31 March 2020 will not have a full reduction.