

**Barnett Waddingham**



# **London Borough of Hounslow Pension Fund**

Actuarial Valuation as at 31 March 2013

**Valuation Report**

Barnett Waddingham LLP

31 March 2014

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## 1. Introduction and Summary

### Purpose of the Valuation

- 1.1. We have carried out an actuarial valuation of the London Borough of Hounslow Pension Fund (“the Fund”) as at 31 March 2013, as requested by London Borough of Hounslow. The Fund is part of the Local Government Pension Scheme (“LGPS”).
- 1.2. The valuation was carried out in accordance with Regulation 36 of The Local Government Pension Scheme (Administration) Regulations 2008 (“the Regulations”) as amended. The main purpose of the valuation is to review the financial position of the Fund and to set the level of future contributions for the employers in the Fund.
- 1.3. This report summarises the results of the valuation and is addressed to London Borough of Hounslow as the Administering Authority to the Fund. It is not intended to assist any user other than the Administering Authority in making decisions. Neither we nor Barnett Waddingham LLP accepts any liability to third parties in respect of this report.
- 1.4. This advice is subject to and complies with Technical Actuarial Standards issued by the Financial Reporting Council (in particular, the Pensions TAS and the generic TASs relating to reporting, data and modelling).
- 1.5. The results of the valuation are that the past service funding level of the Fund as a whole has increased from 81% to 85% between 31 March 2010 and 31 March 2013. There are a number of factors that have contributed to this improvement, including:
  - Better than anticipated investment performance of the assets held by the Fund over the period;
  - Lower than expected salary increases;
  - Payment of contributions towards the Fund deficit.
- 1.6. At the same time, the contribution rate for the average employer, including payments to target full funding, has decreased from 19.7% to 19.4% of pensionable salaries. This is largely due to positive experience over the inter-valuation period resulting in a lower level of future deficit contributions being required to meet the Fund deficit.
- 1.7. We would be pleased to discuss any aspect of this report in more detail.



**Graeme D Muir** FFA



**Alison Hamilton** FFA

## 2. Valuation Data

### Data Sources

2.1. We have used the following items of data:

- Membership extract as at 31 March 2013 provided by Capita;
- Fund accounts and accounting information split by employer for the three years to 31 March 2013, provided by London Borough of Hounslow;
- The results of the previous actuarial valuation as at 31 March 2010.

2.2. The 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.

2.3. A summary of the data is set out in Appendix 1.

### Assets

2.4. The asset allocation of the Fund as at 31 March 2013 was as follows:

Asset Allocation of the Fund	31 March 2013	
	£000's	%
UK Equities	239,513	35%
Overseas Equities	243,661	35%
Corporate Bonds	115,259	17%
Cash	27,407	4%
UK Gilts	34,544	5%
Overseas Bonds	1,692	0%
Property	17,572	3%
Other Assets	10,623	2%
<b>Total</b>	<b>690,271</b>	<b>100%</b>

2.5. We estimate that the return on the assets in market value terms for the three years to 31 March 2013 was approximately 8.8% per annum.

2.6. The current investment strategy is set out in a Statement of Investment Principles issued in 2011.

## Benefits

- 2.7. The valuation has been carried out in accordance with Regulation 36 of The Local Government Pension Scheme (Administration) Regulations 2008 ("the Regulations") as amended.
- 2.8. However from 1 April 2014, The Local Government Pension Scheme Regulations 2013 and the Local Government Pension Scheme (Transitional Provisions and Savings) Regulations 2014 will come into effect and replace the current regulations.
- 2.9. The benefits for service from 1 April 2014 will be based on the Local Government Pension Scheme Regulations 2013. The main changes are to move from a final salary pension scheme based on 60ths accrual and a retirement age of 65 to a career average revalued earnings pension scheme based on 49ths accrual and a retirement age equal to State Pension Age.
- 2.10. The Local Government Pension Scheme (Transitional Provisions and Savings) Regulations 2014 serve the dual purpose of retaining the previous benefit structure for service up to 31 March 2014 and introducing new protections for members close to retirement to ensure that they are not disadvantaged by the benefit changes.
- 2.11. The benefits underlying the valuation are summarised in Appendix 6.
- 2.12. We have made no allowance for any discretionary benefits potentially payable. Where employers grant discretionary benefits we would expect them to fund the capital value of those benefits at that point.

### **3. Actuarial Methods and Assumptions**

#### **General Valuation Approach**

- 3.1. We first estimate the future cashflows which will be paid from the Fund for the benefits relating to service up to 31 March 2013 and we do this for all current members and their possible dependants.
- 3.2. We then discount these projected cashflows using the discount rate to get a single figure for the value of the past service liabilities. This figure is the amount of money which, if invested now, would be sufficient to make these payments in future provided that the future investment return was equal to at least the discount rate used.
- 3.3. Various assumptions are needed for the above calculations and these are summarised in Section 4. The financial assumptions such as future inflation and the discount rate are based on smoothed market indicators from around the valuation date, specifically over the six month period from 1 January 2013 to 30 June 2013.
- 3.4. The market value of the assets at 31 March 2013 is then adjusted to also be smoothed over the same six month period so that a consistent comparison can be made with the liabilities. If the smoothed assets are greater than the past service liabilities, there is a surplus and if not, there is a deficit.
- 3.5. Using the same assumptions and a similar methodology, we can also calculate the value of the liabilities expected to build up in the future after 31 March 2013 and we do this for each active member. This can then be divided by the projected payroll to get a cost of future benefits expressed as a percentage of payroll.
- 3.6. After deducting expected employee contributions, this is known as the future service cost and represents the employers' share of the cost of future benefits.

#### **Multiple Calculations**

- 3.7. As part of the valuation, we are required to calculate results on an overall Fund level but also for the individual employers.
- 3.8. For the Fund's future service cost, we consider the benefits accruing in the single year following the valuation date.
- 3.9. This is known as the Projected Unit Method and 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.
- 3.10. At individual employer level we use the Projected Unit Method for employers who still admit new employees into the Fund.

- 3.11. For employers who do not, or do not appear to, allow new employees to join the Fund, we use a method known as the Attained Age Method which assesses the cost of future benefit accrual over all future years rather than just over the next year. This method generally produces a higher level of employer contribution than the Projected Unit Method but, for these closed employers, it should need less revision in the future.
- 3.12. For closed limited-term employers such as some Transferee Admission Bodies, a modified version of the Projected Unit Method with a control period equal to the remaining term of the contract may be used and this usually gives results between the Projected Unit Method and the Attained Age Method.
- 3.13. The amount that the employer pays is a combination of the above future service cost and any adjustments for the past service surplus or deficit. For most employers, if there is a deficit, this adjustment will be specified as an additional contribution expressed as a lump sum cash amount to be paid in each year.
- 3.14. For those employers with a deficit a recovery plan, this will be agreed with a maximum deficit recovery period of 17 years under normal circumstances. The Administering Authority retains the right to shorten the recovery period if it has concerns about the employer's participation in the Fund. Individual employers may shorten their deficit recovery periods if they wish.
- 3.15. The Administering Authority can also extend the maximum recovery period for an individual employer in exceptional circumstances with agreement of the Fund actuary.

## Funding Strategy

- 3.16. Regulation 36 of the Local Government Pension Scheme Administration (Regulations) 2008 states that the actuary must have regard to
  - The existing and prospective liabilities of the fund arising from circumstances common to all those bodies;
  - The desirability of maintaining as nearly a common a rate of contribution as possible; and
  - The current version of the Administering Authority's Funding Strategy Statement.
- 3.17. The Funding Strategy Statement sets out how employers' liabilities are best met going forward. In particular, it states that employer contribution rates should be held as near to constant as possible whilst having regard to the liabilities and with a view to funding prudently over the long term.
- 3.18. We can confirm that, in our view, the methods and assumptions adopted meet these requirements.

## 4. Valuation Assumptions

4.1. As mentioned in the previous section, various assumptions are needed as part of the valuation.

4.2. The principal assumptions are:

- The discount rate - this is based on the expected investment return from the Fund's assets. In setting this assumption we have made an allowance for the expected future investment of cash holdings into other asset classes shortly after the valuation date, as communicated to us by the Administering Authority.
- Pension increases and deferred revaluation - pension increases and deferred revaluation are set by the Pension Increase Order which is laid by the Government each year and expected to be linked to the Consumer Prices Index. Benefits earned by active members after 1 April 2014 will also be linked to the Pension Increase Order.
- Salary increases - active members' benefits for service before 31 March 2014 will continue to be linked to their final salary.
- Current and future rates of mortality. Over the last decade, life expectancies have increased more quickly than most predictions so it is important that any assumptions made are as accurate as possible.

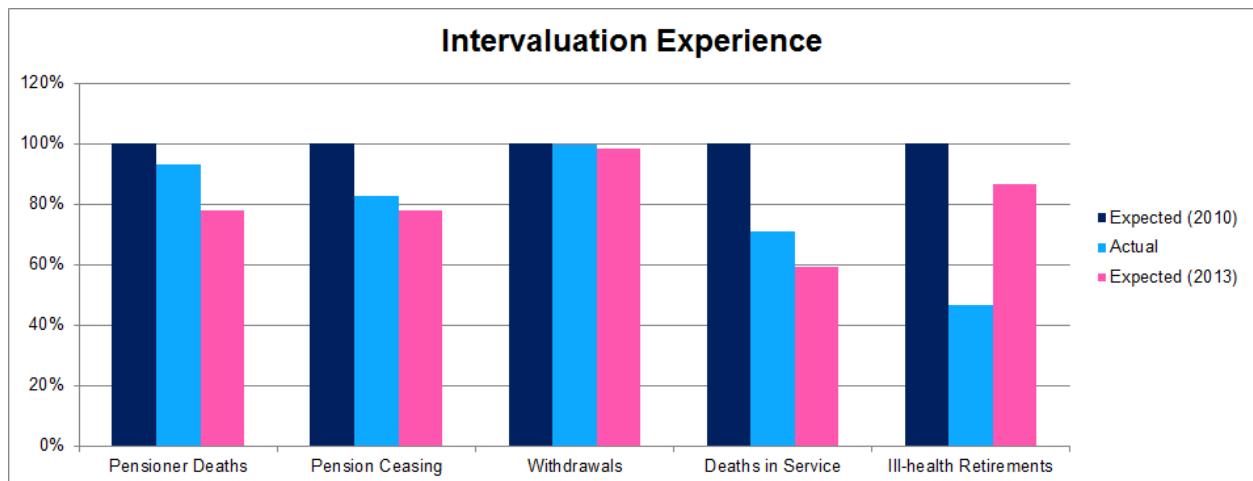
4.3. The assumptions used for this valuation are based on the expected long-term cost of providing the benefits and we believe these are suitable for setting the contribution amounts from employers. If an employer was to leave the Fund, a different set of assumptions may apply to allow for the crystallisation of their funding obligations and the funding assumptions are also not the same as those that would be used for statutory accounting purposes in employers' accounts.

4.4. The assumptions and the rationale for them were discussed in our paper to the Administering Authority of 25 November 2013. Following discussion, the final assumptions adopted are as set out in Appendix 2 and we confirm that we believe that these are appropriate for the purposes of this valuation.

4.5. A comparison of the actual financial experience with the assumptions adopted at the previous valuation is summarised below:

	Actual	Expected
<b>Investment Return</b>	8.8% pa	6.8% pa
<b>Pay Increases **</b>	1.3% pa	2.5% pa
<b>Pension Increases</b>	3.5% pa	3.0% pa
** includes short term overlay		

4.6. A comparison of the actual demographic experience of members of the Fund over the inter-valuation period, with that assumed by the assumptions adopted at the last valuation in 2010 is shown in the graph below. The graph also shows how the assumptions adopted for this valuation would have compared with those adopted at 2010.



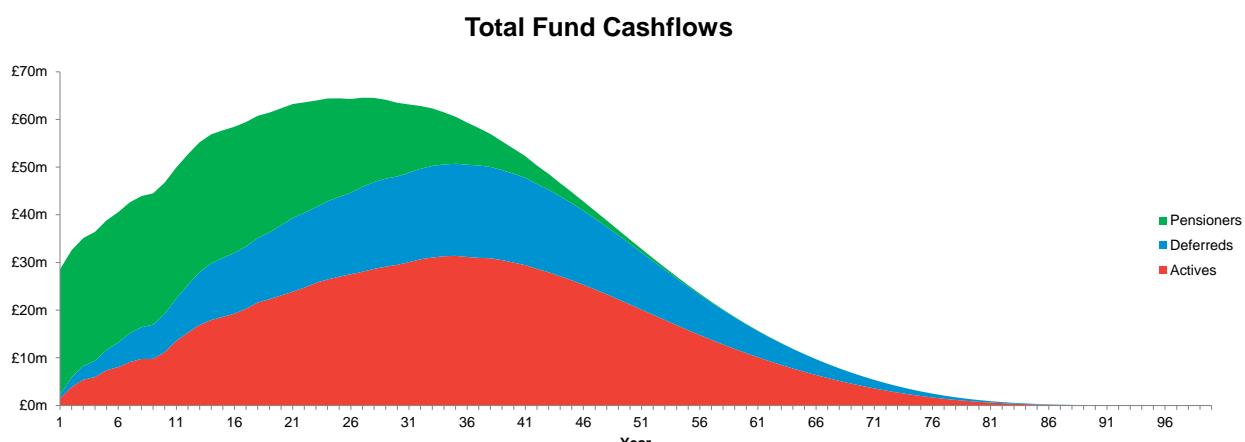
## 5. Valuation Results

### Previous Valuation

- 5.1. The last formal actuarial valuation of the Fund was carried out as at 31 March 2010 by Barnett Waddingham LLP and the results of that valuation were set out in the formal valuation report dated March 2011.
- 5.2. The results of the previous valuation indicated that the assets of the Fund represented 81% of the accrued liabilities of the Fund. The average employer contribution was calculated to be 19.7% of payroll which assumed that the past service funding level would be restored over a period of 17 years.

### Projected Cashflows

- 5.3. As mentioned above, the first stage is to project the expected cashflows in relation to past service, which can be charted as follows:



### Past Service Funding Position and Contribution Rates

- 5.4. The following table sets out the valuation results for the Fund as a whole. 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 17 year period following the valuation date.

<b>Past Service Funding Position</b>		<b>31 March 2013</b>
<b>£000's</b>		
<b>Asset Value</b>		<b>684,222</b>
<b>Value of Accrued Liabilities</b>		
Active Members		261,004
Deferred Members		165,635
Pensioner Members		381,900
<b>Total Liabilities</b>		<b>808,539</b>
<b>Surplus/(Deficit)</b>		<b>(124,317)</b>
<b>Funding Level</b>		<b>85%</b>
<b>Employer Contribution Rates</b>	<b>% of Payroll</b>	
Future Service Cost		12.9%
Deficit Recovery over 17 years		6.5%
<b>Total</b>		<b>19.4%</b>

5.5. As we see, the funding level as at 31 March 2013 was 85% and the average required employer contribution to restore the funding position to 100% over the next 17 years is 19.4% of pensionable pay.

5.6. The contributions payable by each employer are set out in Appendix 4. These are based on either the employer's own membership and experience, or they are the employer's share of the contributions payable within a pool of employers.

## Sensitivity Analysis

5.7. It is important to understand that these results indicate the expected cost of providing the benefits using the chosen method and assumptions. The actual cost of providing the benefits will depend on the actual experience.

5.8. In order to illustrate this, a number of calculations have been carried out to highlight the sensitivity of the funding position to the assumptions adopted, focusing on the assumptions to which the funding position is most sensitive, as shown below:

Assumption change	Effect on Deficit
Decreasing the discount rate by 0.5% per annum	Increase by £68m
Increasing the CPI assumption by 0.5% per annum	Increase by £62m
Increasing the long-term rate of salary increase by 0.5% per annum	Increase by £7m
Increasing the long-term rate of improvement used in the mortality projection from 1.5% to 1.75% per annum	Increase by £7m

## Projected Future Results

5.9. The progression of the funding level over time is influenced by a large number of factors, including any changes in membership, the investment return achieved and the contributions paid.

5.10. We estimate that 3 years after the valuation date (i.e. at the next valuation) the funding position on the same basis will be 87%. This allows for contributions to be paid as certified and assumes that investment returns and other experience over the next 3 years are in line with the assumptions described above.

## Neutral Estimate

5.11. We are also required to consider whether the assumptions used are neutral, that is “not deliberately either optimistic or pessimistic and does not incorporate adjustments to reflect the desired outcome”.

5.12. Other than the discount rate, we consider all the assumptions used to be neutral.

5.13. We would consider a neutral discount rate to be 6.4% per annum rather than 6.0% per annum. The higher neutral discount rate results from removing some prudence from the equity return assumption. As a consequence we expect that the future returns from the Fund’s investment strategy will be higher than the valuation discount rate and so we believe that the contributions set for this valuation are more likely to be sufficient to meet the cost of providing the benefits than not.

## Valuation Reconciliation

5.14. The following table sets out the principal reasons for the change in the funding position since the last valuation:

Change in Past Service Position	£(000)	£(000)
<b>Surplus(Deficit) at 31 March 2010</b>		<b>(120,172)</b>
Benefits Accrued	(62,553)	
Early Retirements	(3,878)	
Contributions Paid	<u>103,060</u>	
<b>Deficit Funded (Use of Surplus)</b>	<b>36,629</b>	
Interest Cost	(20,759)	
Asset Gain/Loss	59,269	
Change in Market Conditions	<u>(66,678)</u>	
<b>Financial Gain(Loss)</b>	<b>(28,168)</b>	
Salary Increases	9,772	
Pension Increases	(6,937)	
Membership Movements	<u>(582)</u>	
<b>Experience</b>	<b>2,253</b>	
<b>Change in Assumptions</b>	<b>(14,859)</b>	
<b>Surplus(Deficit) at 31 March 2013</b>		<b>(124,317)</b>

5.15. As we can see, the main reason for the increase in the deficit is the deterioration in market conditions underpinning the financial assumptions.

## 6. Risk and Uncertainty

- 6.1. There are many factors that affect the financial position of the Fund, in particular:
- 6.2. Employer covenant risk – there is a risk to the Fund that any of the employing bodies may be unable to pay contributions or meet any cessation deficits as they fall due.
- 6.3. The Fund should monitor the strength of each employer in the Fund over time, so that any sudden changes in an employer's position can be mitigated.
- 6.4. Investment risk - allowance is made in the assumptions for the expected long-term performance of asset classes such as equities. There is a risk that these returns will not be achieved in practice, which may result in further contributions being required. Further, the value of the Fund's assets may not move in line with the Fund's liabilities – mainly because the Fund invests in volatile assets whose value might fall or rise less than expected.
- 6.5. The sensitivity of the valuation results to changes in the investment return assumption is shown in section 5.8 above. The Fund should regularly review the investment strategy to ensure the risks being taken are understood and that those risks are being appropriately managed.
- 6.6. Inflation - in projecting the expected future benefit payments, assumptions are made regarding future price inflation. There is a risk that the actual rate of inflation will be higher than assumed which will increase the cost of providing the benefits. This would result in additional contributions being required and a deterioration in the funding position unless investment returns are similarly higher than expected.
- 6.7. The sensitivity of the results to the choice of inflation assumptions is also shown above.
- 6.8. Mortality - it is not possible to predict with any certainty how long members of the Fund will live, and if members live longer than expected, the Fund's funding position will deteriorate and additional contributions will be required.
- 6.9. The sensitivity of the results to the choice of mortality assumptions is also shown above. The Fund should review the mortality assumptions at each valuation, taking into account all available evidence, to ensure they remain appropriate for the Fund.
- 6.10. Member options - certain benefit options may be exercised by members without the consent of the Fund or the Employer. For example, exchanging pension for cash at retirement or taking a transfer value. The value of the cash benefit is generally expected to be less than the value of the pension exchanged so the funding position would only deteriorate if fewer members than expected took this option. Individual transfer values can be higher or lower than the value of the valuation liabilities, depending on the particular member and market conditions.

6.11. Legislative changes – there are a number of legislative risks to the Fund and the LGPS in general, including:

- All benefits relating to membership after 31 March 2014 will be linked to the individual's State Pension Age and the Chancellor of the Exchequer's Autumn 2013 Statement outlined plans to increase this for some individuals. This valuation is based on the current legislation so if these plans are enacted, some members will find the value of their future benefits reduced and this would be expected to reduce the cost of meeting these benefits.
- Contracting-out of the State Second Pension is due to end in 2016 and it is not yet clear what the effect on the LGPS will be.
- The potential effects of GMP equalisation between males and females, if implemented, are not yet known.
- As part of the changes to the LGPS from 1 April 2014, a cost control mechanism has been implemented so that if the future cost turns out to be higher or lower than expected when the reforms were made, a review of the benefits may be triggered which may alter the benefits received by members of the Fund.
- If the LGPS was to be discontinued in its current form, it is not known what would happen to members' benefits.
- More generally, as a statutory scheme, the benefits provided by the LGPS could be changed by the Government as well as the form of the scheme.

## Appendix 1 Valuation Data

A1.1. A summary of the membership records submitted for the valuation is as follows.

Active Members			Actual Pensionable Pay			Average		This Valuation	
	Number		£ (000)		£	Average Age	Average Retirement Age		
Full Time	2013	2010	2013	2010	2013	2010	Average Age	63	
Males	1,285	1,300	39,754	39,315	30,937	30,243	45	63	
Females	1,323	1,389	40,357	40,092	30,504	28,864	45	63	
Part Time									
Males	304	264	4,195	3,033	13,800	11,490	44	64	
Females	3,386	2,902	41,197	34,134	12,167	11,762	46	64	
<b>Total</b>	<b>6,298</b>	<b>5,855</b>	<b>125,503</b>	<b>116,575</b>	<b>19,927</b>	<b>19,910</b>	<b>46</b>	<b>63</b>	
Pensioners	Annual Pensions			Average		This Valuation			
	Number		£ (000)		£	Average Age	Average Retirement Age		
	2013	2010	2013	2010	2013	2010	Average Age	n/a	
Males	1,735	1,647	13,088	10,796	7,544	6,555	71	n/a	
Females	2,920	2,640	11,348	8,850	3,886	3,352	72	n/a	
Dependants	731	699	2,037	1,849	2,787	2,645	71	n/a	
<b>Total</b>	<b>5,386</b>	<b>4,986</b>	<b>26,473</b>	<b>21,495</b>	<b>4,915</b>	<b>4,311</b>	<b>71</b>	<b>n/a</b>	
Deferred Pensioners	Annual Pensions			Average		This Valuation			
(including "undecideds")	Number		£ (000)		£	Average Age	Average Retirement Age		
	2013	2010	2013	2010	2013	2010	Average Age		
Males	2,093	1,852	4,868	4,102	2,326	2,215	45	62	
Females	4,642	3,756	6,450	5,112	1,389	1,361	46	63	
<b>Total</b>	<b>6,735</b>	<b>5,608</b>	<b>11,317</b>	<b>9,214</b>	<b>1,680</b>	<b>1,643</b>	<b>46</b>	<b>62</b>	

### Notes

A1.2. 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.

A1.3. Annual pensions are funded items only and include pension increases up to and including the 2013 Pension Increase Order.

A1.4. Pensionable pay is actual earnings.

A1.5. A summary of the assets held by the fund at the valuation date and the revenue account for the three years preceding the valuation date is as shown below.

Revenue Accounts	Year to	March 2013	March 2012	March 2011	TOTAL
		£ (000)	£ (000)	£ (000)	
Expenditure	Retirement Pensions	24,463	22,825	21,483	68,771
	Retirement Lump Sums	6,400	4,588	5,615	16,603
	Death Benefits	732	574	487	1,793
	Leavers Benefits	1,586	3,733	5,671	10,990
	Expenses	1,017	1,195	1,191	3,403
	Other Expenditure	-	-	-	-
<b>Total Outgo</b>		<b>34,198</b>	<b>32,915</b>	<b>34,447</b>	<b>101,560</b>
Income	Employees Ctns	7,432	7,291	7,665	22,388
	Employers Ctns	33,584	23,158	23,930	80,672
	Transfer Values	3,514	2,985	2,484	8,983
	Other Income	-	-	-	-
Investment Income		15,907	16,583	14,191	46,681
<b>Total Income</b>		<b>60,437</b>	<b>50,017</b>	<b>48,270</b>	<b>158,724</b>
<b>New Money for Investment</b>		<b>10,332</b>	<b>519</b>	<b>(368)</b>	<b>10,483</b>
<b>Fund Value</b>					
Assets at Start of Year		597,620	574,246	527,441	527,441
Cashflow		26,239	17,102	13,823	57,164
Change in Value		66,412	6,272	32,982	105,666
Assets at End of Year		690,271	597,620	574,246	690,271
<b>Annual Returns</b>					
Approx Rate of Return (per annum)		13.8%	4.0%	8.9%	8.8%

## Appendix 2 Actuarial Assumptions

A2.1. A summary of the assumptions adopted in the valuation is set out below:

Future Assumed Returns at 2013		Risk Adjusted Discount Rate Weighting (rounded)
Equities	6.9% per annum	75%
Gilts	3.3% per annum	15%
Cash	3.1% per annum	0%
Property	6.0% per annum	3%
Corporate Bonds	3.9% per annum	7%
Expense allowance	0.1% per annum	
Financial Assumptions	2013	2010
Discount Rate	6.0% per annum (as above)	6.8% per annum
Retail Price Inflation (RPI)	3.5% per annum (20 year point on the BoE Inflation Curve)	3.5% per annum
Consumer Price Inflation (CPI)	2.7% per annum (RPI less 0.8%)	3.0% per annum
Pension and Deferred Pension Increases	2.7% per annum (RPI less 0.8%)	3.0% per annum
Short Term Pay Increases	In line with the CPI assumption for the 2 years to 31 March 2015	Pay freeze for those earning over £21k for the 2 years to 31 March 2012
Long Term Pay Increases	4.5% per annum (RPI plus 1% per annum)	5.0% per annum

Statistical Assumptions	2013	2010
Post Retirement Mortality		
Current Mortality	S1PA tables with a multiplier of 110% for males and 85% for females	S1PA Heavy tables
Mortality Projection	2012 CMI Model with a long term rate of improvement of 1.5% per annum	CMI Medium Cohort with a 1% per annum underpin
	Each member retires at their weighted average "tranche retirement age", i.e. for each tranche of benefit, the earliest age they could retire with unreduced benefits	For each tranche of benefit, active members retire 1 year later than entitled to retire and receive unreduced benefits. Deferred members retire at the earliest age they can receive unreduced benefits
Retirement Ages	If the member is over this retirement age, then it is assumed they will retire at their oldest tranche retirement age. If over the oldest tranche retirement age, the member is assumed to have a 1/3 chance of retiring in each of the next 3 years, and it is assumed all members will be retired by age 75	Active and deferred members over these respective ages are assumed to retire immediately

Statistical Assumptions	2013	2010
Proportion Married	There is an 80%/70% chance that male/female members will, at retirement or earlier death, have a dependant who is eligible for death benefits	90% of members are assumed to be married or have an eligible dependant at retirement or earlier death
Partner Age Difference	Males are 3 years older than their spouse and Females are 3 years younger than their spouse	Males are 3 years older than their spouse and Females are 3 years younger than their spouse
III-health Tiers	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	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
Commutation	It is assumed that members at retirement will commute pension to provide a lump sum of 50% of the maximum allowed under HMRC rules and this will be at a rate of £12 lump sum for £1 of pension	It is assumed that members at retirement will commute pension to provide a lump sum of 50% of the maximum allowed under HMRC rules and this will be at a rate of £12 lump sum for £1 of pension
50/50 Scheme Allowance	It is assumed that 10% of active members will opt to pay 50% of contributions for 50% of benefits under the new scheme	n/a
Other Statistical Assumptions	Same as used by Government Actuary's Department when LGPS reforms were designed and based on analysis of incidence of death, retirement and withdrawal for Local Authority Funds	Based on our analysis of the incidence of pre-retirement death, retirement and withdrawal of our Local Authority client funds.

Sample rates shown below

Age	Incidence per 1000 active members per annum									
	Death		III Health Retirement		Withdrawal		Salary Scales		Males	Females
	Males	Females	Males	Females	Males	Females	Males	Females		
25	0.1	0.1	0.1	0.1	122.0	144.5	100	100		
30	0.2	0.1	0.2	0.1	104.4	122.4	102	101		
35	0.3	0.2	0.3	0.3	89.4	103.6	111	105		
40	0.5	0.3	0.6	0.5	76.5	87.7	117	108		
45	0.8	0.5	1.1	0.8	65.5	74.3	121	110		
50	1.3	0.8	2.2	1.6	56.0	62.9	124	110		
55	2.1	1.3	4.1	2.9	48.0	53.3	127	110		
60	3.4	2.0	7.8	5.3	41.0	45.1	127	110		
65	5.4	3.0	14.8	9.8	35.1	38.2	127	110		

## Appendix 3 Individual Employer Data as at 31 March 2013

Employer Membership Data		Active Members			Deferred Members			Pensioner Members		
Code	Employer	Number	Actual Pay	Average Age	Number	Deferred Pensions	Average Age	Number	Pensions in Payment	Average Age
HOUNSLOW	London Borough of Hounslow	4,729	£88,963,159	45	5,801	£9,408,061	46	4,732	£23,213,703	72
HOUNSRAC	Hounslow Racial Equality Council	2	Note (1)	54	13	£22,015	42	5	£3,254	67
WTHMSCOL	West Thames College	121	£2,633,263	46	169	£265,862	45	97	£416,135	69
HOUNSHMS	Hounslow Homes	525	£15,382,947	47	270	£654,733	43	219	£1,312,459	64
APETITO	Apetito	3	Note (1)	37	4	Note (1)	54	8	£19,138	64
FUSION	Fusion	77	£1,555,227	45	5	£21,025	40	8	£42,307	63
JHNLAIN	John Laing	43	£843,067	49	17	£81,079	44	13	£81,340	63
HOUNSCS	Hounslow Community Services	92	£1,825,368	49	17	£75,548	46	26	£193,502	59
CNTLNSCP	Continental Landscapes	1	Note (1)	29	-	-	-	-	-	-
LBSCOPE	Scope	2	Note (1)	60	1	Note (1)	57	1	Note (1)	68
JEWSONS	Jewson	5	£134,461	52	-	-	-	-	-	-
SITA	SITA	29	£662,158	50	6	£18,992	44	5	£38,090	65
BRUNELCL	Brunel University College	-	-	-	17	£25,547	53	78	£237,464	77
GUMLSCHL	Gumley School	-	-	-	3	Note (1)	50	2	Note (1)	79
HOUNSMGC	Hounslow Magistrates Court	-	-	-	25	£53,175	47	18	£121,850	75
GNRSPKJC	Gunnersby Park Joint CTTE	-	-	-	1	Note (1)	59	5	£26,959	79
CRANPKJC	Cranford Park Joint Committee	-	-	-	1	Note (1)	56	5	£9,575	81
HST&ISLE	Heston & Isleworth Old Peoples	-	-	-	-	-	-	1	Note (1)	96
HOUNSHA	Hounslow Hospital Association	-	-	-	-	-	-	1	Note (1)	75
HOUNSCMT	Hounslow Community Transport	-	-	-	1	Note (1)	51	3	Note (1)	79
FELTHAC	Age Concern Feltham	-	-	-	-	-	-	2	Note (1)	64
GUNNSCHL	Gunnersbury School	-	-	-	1	Note (1)	30	2	Note (1)	79
BRENTFRP	Brentford Regeneration Partnership	-	-	-	1	Note (1)	59	-	-	-
COMINITP	Community Initiatives Partnership	-	-	-	21	£97,793	48	14	£86,882	67
CULT&COM	Hounslow Cultural & Community Services	-	-	-	190	£243,651	47	100	£438,498	67

Employer Membership Data		Active Members			Deferred Members			Pensioner Members		
Code	Employer	Number	Actual Pay	Average Age	Number	Deferred Pensions	Average Age	Number	Pensions in Payment	Average Age
SPRT&REC	Hounslow Sport & Recreation Services	-	-	-	72	£154,354	43	19	£109,219	70
BRENACAD	Brentford School for Girls	42	£894,540	50	-	-	-	1	Note (1)	57
CHISWICK	Chiswick School	54	£1,116,697	47	11	£31,841	42	2	Note (1)	63
FELTHAM	Feltham Community College	74	£1,315,345	42	20	£31,027	36	3	Note (1)	58
GUMACAD	Gumley House Catholic School	56	£889,608	50	1	Note (1)	38	1	Note (1)	64
HESTON	Heston Community School	67	£956,132	44	2	Note (1)	58	4	Note (1)	63
ISLEWOR	Isleworth & Syon School for Boys	36	£778,574	45	4	Note (1)	35	-	-	-
RIVERS	Rivers Academy West London	36	£685,697	46	9	£26,163	42	-	-	-
STMARK	St Mark's Catholic School	36	£672,229	47	2	Note (1)	34	1	Note (1)	60
LAMPSCHL	Lampton School	50	£1,055,644	48	11	£21,680	45	2	Note (1)	68
CRANFORD	Cranford Community College	51	£1,114,607	42	25	£29,997	35	4	Note (1)	51
REACH	Reach Academy	5	£81,066	43	-	-	-	-	-	-
CHURCHAE	Churchill Catering	1	Note (1)	57	-	-	-	-	-	-
EVOSTLAW	EVO	1	Note (1)	61	1	Note (1)	51	-	-	-
CRANSTOU	Cranstoun	2	Note (1)	38	-	-	-	-	-	-
CATERSER	Caterleisure	8	£131,383	54	-	-	-	-	-	-
EACH	Each	1	Note (1)	61	-	-	-	-	-	-
HESTIA	Hestia	2	Note (1)	40	1	Note (1)	33	1	Note (1)	59
STMARY	St Mary's	3	Note (1)	44	-	-	-	-	-	-
RINGWAY	Highways PFI Contract - VINCI Ringway	135	£3,302,844	47	7	£11,025	38	1	Note (1)	61
NVIRO	NVIRO	3	Note (1)	61	-	-	-	1	Note (1)	65
HOUNSHAY	Hounslow Action for Youth	1	Note (1)	29	2	Note (1)	34	-	-	-
HOUNCRED	Hounslow Pension Credit	-	-	-	3	Note (1)	54	-	-	-
HOUNSLSC	Hounslow - LSC Members	5	£111,379	35	-	-	-	1	Note (1)	61
<b>Total</b>		<b>6,298</b>	<b>£125,502,585</b>	<b>46</b>	<b>6,735</b>	<b>£11,317,319</b>	<b>46</b>	<b>5,386</b>	<b>£26,472,910</b>	<b>71</b>

Note (1) Membership details have been excluded for privacy reasons where there are fewer than 5 members.

## Appendix 4 Rates and Adjustment Certificate

A4.1. The Common Rate of Contribution as defined by Regulation 36 for the period 1 April 2014 to 31 March 2017 is 19.4% of pensionable payroll.

A4.2. However, each employer pays contributions based on their particular circumstances and so individual adjustments are made. These give the following minimum total contributions as set out below.

Capita Code	Employer	Employer contributions due as a % of pensionable salary for the year beginning			Additional employer contributions due as monetary amounts in the year beginning		
		1 Apr 2014	1 Apr 2015	1 Apr 2016	1 Apr 2014	1 Apr 2015	1 Apr 2016
HOUNSLOW	London Borough of Hounslow	12.7%	12.7%	12.7%	£7,295,000	£7,295,000	£7,295,000
HOUNSRAC	Hounslow Racial Equality Council	14.7%	14.7%	14.7%			
WTHMSCOL	West Thames College	13.0%	13.0%	13.0%	£208,000	£217,000	£227,000
HOUNSHMS	Hounslow Homes	16.0%	16.0%	16.0%	£203,500	£212,700	£222,400
FUSION	Fusion	14.1%	14.1%	14.1%			
JHNLAIN	John Laing	16.5%	16.5%	16.5%			
HOUNSCS	Hounslow Community Services	15.6%	15.6%	15.6%			
LBSCOPE	Scope	17.2%	17.2%	17.2%	£2,000	£2,000	£2,000
JEWSONS	Jewson	19.7%	19.7%	19.7%			
SITA	SITA	20.1%	20.1%	20.1%			
BRENACAD	Brentford School for Girls	13.5%	13.5%	13.5%	£60,000	£63,000	£65,000
CHISWICK	Chiswick School	13.5%	13.5%	13.5%	£75,000	£78,000	£82,000
FELTHAM	Feltham Community College	13.5%	13.5%	13.5%	£88,000	£92,000	£96,000
GUMACAD	Gumley House Catholic School	13.5%	13.5%	13.5%	£60,000	£62,000	£65,000
HESTON	Heston Community School	13.5%	13.5%	13.5%	£64,000	£67,000	£70,000
ISLEWOR	Isleworth & Syon School for Boys	13.5%	13.5%	13.5%	£52,000	£55,000	£57,000
RIVERS	Rivers Academy West London	13.5%	13.5%	13.5%	£46,000	£48,000	£50,000
STMARK	St Mark's Catholic School	13.5%	13.5%	13.5%	£45,000	£47,000	£49,000
LAMPSCHL	Lampton School	13.5%	13.5%	13.5%	£71,000	£74,000	£77,000
CRANFORD	Cranford Community College	13.5%	13.5%	13.5%	£75,000	£78,000	£82,000
REACH	Reach Academy	13.5%	13.5%	13.5%	£2,000	£2,000	£2,000
EVOSTLAW	EVO	0.0%	0.0%	27.4%	£1,500	£1,600	
CRANSTOU	Cranstoun	14.0%	14.0%	14.0%			
CATERSER	Caterleisure	20.1%	20.1%	20.1%			
EACH	Each	0.0%	24.0%	24.0%	£13,100		
HESTIA	Hestia	12.0%	12.0%	12.0%			
STMARY	St Mary's	18.4%	18.4%	18.4%			
RINGWAY	Highways PFI Contract - VINCI Ringway	16.1%	16.1%	16.1%			
NVIRO	NVIRO	23.8%	23.8%	23.8%			
HOUNSHAY	Hounslow Action for Youth	12.0%	12.0%	12.0%			

### Notes

A4.3. Further sums should be paid to the Fund to meet the costs of any early retirements using methods and assumptions discussed with us.

A4.4. The certified contribution rates represent the minimum level of contributions to be paid. Employers may pay further amounts at any time and future periodic contributions, or the timing of contributions, may be adjusted on a basis approved by ourselves.

A4.5. Contributions are due to be paid monthly in arrear unless otherwise agreed between an employer and the Administering Authority. Any such agreements are reflected in the amounts certified above.

### **Projected New Benefits**

A4.6. The following table shows the amount of new pension and lump sum benefits projected to come into payment during the period 1 April 2014 to 31 March 2017.

<b>Year to</b>	<b>Retirement Benefits £(000)</b>
31 March 2015	6,058
31 March 2016	7,500
31 March 2017	7,472

## Appendix 5 New Employers since 31 March 2013

A5.1. The following table lists those employers who have joined the Fund since 31 March 2013. Their rates were certified at their date of joining and will continue as set out until 1 April 2017 when they will be assessed as part of the next formal valuation.

Code	Employer	Employer contributions due as a % of pensionable salary for the year beginning			Additional employer contributions due as monetary amounts in the year beginning		
		1 Apr 2014	1 Apr 2015	1 Apr 2016	1 Apr 2014	1 Apr 2015	1 Apr 2016
SERCO	Serco	14.2%	14.2%	14.2%			
	Westbrook Academy	13.5%	13.5%	13.5%	£33,100	£34,700	£36,200
	The Green School for Girls	13.5%	13.5%	13.5%	£47,300	£49,500	£51,700
HOUNSMAN	Kingsley Academy	13.5%	13.5%	13.5%	£57,000	£59,600	£62,300
	Norwood Green Junior School	13.5%	13.5%	13.5%	£8,700	£9,100	£9,500
	Oriel Primary School	13.5%	13.5%	13.5%	£24,100	£25,200	£26,400
	Cucina	18.0%	18.0%	18.0%			
	WLGMP	15.3%	15.3%	15.3%			
	DS Catering	20.3%	20.3%	20.3%			

### Notes

A5.2. Further sums should be paid to the Fund to meet the costs of any early retirements using methods and assumptions discussed with us.

A5.3. 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.

A5.4. Contributions are due to be paid monthly in arrear unless otherwise agreed between an employer and the Administering Authority. Any such agreements are reflected in the amounts certified above.

## Appendix 6 LGPS Benefits

A6.1. The benefit changes from 1 April 2014 involve the formation of a new scheme, referred to below as LGPS 2014. Transitional regulations are applied so that the benefits in the previous LGPS 2008 Scheme are maintained.

LGPS Benefits	LGPS 2014		LGPS 2008			
Type of Scheme	Career Average Revalued Earnings (CARE)		Final Salary			
Pension Benefit Accrual	1/49 <sup>th</sup>		1/60 <sup>th</sup> for service after 1 April 2008. Benefits for service before 31 March 2008 were based on 1/80 <sup>th</sup> accrual and an automatic lump sum of 3/80 <sup>ths</sup> .			
Revaluation	Consumer Prices Index (CPI)		Based on Final Salary			
Lump Sum	By commutation 12:1 up to a maximum of 25% of lifetime allowance					
Pensionable Pay	Pay <b>including</b> non-contractual overtime and additional hours for part time staff		Pay <b>excluding</b> non-contractual overtime and non-pensionable additional hours			
Member Contributions	Banded Contributions based on <b>actual</b> pensionable pay		Banded Contributions based on <b>full time equivalent</b> pensionable pay			
	Range	Gross Rate	Range	Gross Rate		
	Up to £13,500	5.5%	Up to £13,700	5.5%		
	£13,501 to £21,000	5.8%	£13,701 to £16,100	5.8%		
	£21,001 to £34,000	6.5%	£16,101 to £20,800	5.9%		
	£34,001 to £43,000	6.8%	£20,801 to £34,700	6.5%		
	£43,001 to £60,000	8.5%	£34,701 to £46,500	6.8%		
	£60,001 to £85,000	9.9%	£46,501 to £87,100	7.2%		
	£85,001 to £100,000	10.5%	More than £87,100	7.5%		
	£100,001 to £150,000	11.4%				
	More than £150,000	12.5%				
Contribution Flexibility	Member can pay 50% contributions for 50% of the pension benefit		Not Available			
Normal Pension Age	Linked to individual member's State Pension Age (minimum age 65)		Age 65			
Death in Service Lump Sum	3 x <b>Pensionable Pay</b>					
Death in Service Survivor Benefits	1/160 <sup>th</sup> accrual based on potential service to <b>Normal Pension Age</b>					
III Health Provision	Tier 1 - Immediate payment with service enhanced to <b>Normal Pension Age</b>					

LGPS Benefits	LGPS 2014	LGPS 2008
	Tier 2 - Immediate payment with 25% service enhancement to <b>Normal Pension Age</b>	
	Tier 3 - Temporary payment of pension for up to 3 years	
<b>Post Retirement Revaluation</b>		Pension Increase Orders
<b>Vesting Period</b>	2 years	3 months
<b>Early Payment - Reduction to Benefits (Rule of 85)</b>	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.	