



# Government Actuary's Department

## **Local Government Pension Scheme (England and Wales)**

**Actuarial valuation as at 31 March 2013**

**Report on data used for experience analysis**

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## **1 Introduction**

- 1.1 This report has been prepared by the Government Actuary's Department (GAD) in its capacity as actuarial advisor to the Department for Communities and Local Government (DCLG).
- 1.2 The purposes of this report are:
- > to discuss and summarise the member experience data provided and to be used for the purposes of analysing the experience of the Local Government Pension Scheme (England and Wales) ('the Scheme' or 'LGPS') over the three-year inter-valuation period from 1 April 2010 to 31 March 2013; and
  - > to ensure that users of the valuation report understand the issues relating to the data used and in particular those issues that may have a material impact on the valuation results.
- 1.3 Membership data used for the actuarial valuation calculations is the subject of a separate report.
- 1.4 Membership data was requested from the administering authorities representing the 89 funds, plus the Environment Agency Closed and Active Funds (see Appendix A). A data specification was provided together with a template in the form of a spreadsheet, for the data submission. This indicated the form in which GAD wished to receive the data, and the precise information to be included.
- 1.5 In preparing this report GAD has relied on data and other information supplied by or on behalf of administering authorities, as described in this report. Any checks that GAD has made on this information are limited to those described in this report, including any checks on the overall reasonableness and consistency of the data. These checks do not represent a full independent audit of the data supplied. In particular, GAD has relied on the general completeness and accuracy of the information supplied without independent verification.
- 1.6 This report is intended solely for the use of DCLG. We are content for DCLG to release this report to third parties, provided that:
- > it is released in full
  - > the advice is not quoted selectively or partially
  - > GAD is identified as the source of the report, and
  - > GAD is notified of such release.
- 1.7 Third parties whose interests may differ from those of DCLG should be encouraged to seek their own actuarial advice where appropriate. GAD has no liability to any person or third party for any act or omission taken, either in whole or in part, on the basis of this report.



## **2 Description of movements data provided**

### **Movement data – general**

- 2.1 In most cases, the authorities arranged for the data to be provided on their behalf by their actuarial advisers. This was generally satisfactory since it meant that there was consistent data provision within each actuarial firm, and the small number of firms involved meant that there were a limited number of interpretations of the data specification. A small number of authorities supplied data themselves.
- 2.2 Data from three authorities was excluded entirely because it either arrived too late to be included in the valuation or it lacked pay information. In total therefore, the data considered covers 86 funds, plus the Environment Agency Closed and Active Funds, giving a total of 88 funds. Further details of the data review process is given in the report “Actuarial valuation as at 31 March 2013: Report on membership data”.

### **Movement data – actives**

- 2.3 Movements data on actives was provided in the form of individual member records for active members who left or (re)joined over the inter-valuation period (1 April 2010 to 31 March 2013). The data items provided for each member are summarised in Appendix B.

### **Movement data – deferreds**

- 2.4 Movements data was provided in the form of individual member records for new deferred pensioners and those exiting deferred status in the inter-valuation period. The data items provided for each member are summarised in Appendix C.

### **Movement data – pensioners and dependants**

- 2.5 Movements data was provided showing pensioner deaths and new pensioners occurring in the inter-valuation period. The data items provided for each member are summarised in Appendix D.
- 2.6 The data for actives and pensioners was also intended to indicate whether a member's death gave rise to payment of a pension to a dependant so that this information could be analysed to inform the assumptions around proportions married or with an eligible dependant. However, there were shortcomings and inconsistencies in this aspect of the data provision so that this analysis did not yield reliable results.

### **Year-end data**

- 2.7 We have also been provided with details of active members' individual pensionable salaries as at 31 March 2013. This data was used for the analysis of the promotional salary scale.



- 2.8 The promotional salary scale analysis is based on two components of the year-end data: the member's reckonable service and salary. Reckonable service is taken as the sum of the accrued service and any transferred-in service data fields. Salary is taken as the member's full-time equivalent annual rate of pay as at 31 March 2013.
- 2.9 Data from 88 funds (see paragraph 2.2) was used for the promotional salary scale analysis.



### **3 Checks carried out on the data**

- 3.1 Data provided was reviewed against the data specification for both completeness and consistency. In a number of cases this led to requests for revised data sets to be submitted, especially where significant items of data were initially omitted.

#### **Problems encountered with movements data**

- 3.2 There were material shortcomings in some of the experience datasets provided. Overall, we did not receive data on membership movements over the 3-year period ending on 31 March 2013 from all the local authorities of an adequate standard to include in this experience analysis. The main issues related to the data needed for the pensioner mortality analysis and for the active member analysis, as described below.

#### ***Analysis of pensioner mortality***

- 3.3 For a number of funds (representing about 18% of the pensioner population as at 31 March 2013), we were not able to use the data for the pensioner mortality analysis because there was too much uncertainty regarding the way that deaths had been recorded in order to enable a satisfactory split of deaths between pensioners in normal health retirement, pensioners in ill-health retirement, and dependants.
- 3.4 We have therefore excluded those funds from our analysis, but in doing so the main concern was whether the remaining data set was likely to represent the entire Scheme's experience adequately or whether there would now be some inherent bias: for example, the excluded data sets might have different characteristics from the included data sets due to having different geographical weighting. We therefore carried out some limited testing for possible bias and, on the basis of the results of that analysis, concluded that there was no evidence that the exclusion of these datasets introduced bias.

#### ***Analysis of active service decrements***

- 3.5 For a number of funds (representing about 13% of the active membership as at 31 March 2013), we were not able to use the data to analyse active members who have left service (eg due to retirement, ill health retirement, death or voluntary withdrawal without an immediate pension) because in many cases the data did not provide the reason for leaving. We have again excluded these funds from our analysis, and therefore similar concerns regarding potential bias exist.



## 4 Summary of membership movements

### Summary – actives

4.1 Data from 78 funds was used for the analysis for actives.

**Table 4.1: Summary of active movement data**

<b>Movement</b>	<b>Number</b>
Retirement due to age	67,323
Withdrawal <sup>1</sup>	294,024
Retirement due to ill-health	8,800
Death	4,111
Other <sup>2</sup>	186,919
<b>Total</b>	<b>561,177</b>

### Summary – pensioners and dependants

4.2 Data from 69 funds was used for the analysis for pensioners and dependants.

**Table 4.2: Summary of pensioner and dependants movement data**

<b>Membership category</b>	<b>Movement</b>	<b>Amount (£000s per annum)</b>
Pensioners who had retired in normal health	Cessation due to death	220,223
Pensioners who had retired in ill-health	Cessation due to death	73,889
Dependants	Cessation due to death	58,383
<b>Total</b>	<b>Cessation due to death</b>	<b>352,495</b>

<sup>1</sup> Includes members who left with less than 2 years' service

<sup>2</sup> Includes movements that were not used in the analysis of experience, for example: club transfers, inter-fund transfers, bulk transfers, redundancies, and where reason for the movement was recorded as unknown.



## **5 Limitations of analysis based on data**

- 5.1 The data described in this report is to be used to inform the process of setting assumptions for the valuation to be undertaken as at 31 March 2013. Past experience over a particular period does not necessarily correlate to an exact expectation for a particular future period. Therefore the weight that is attached to the precise outcome of the inter-valuation experience analysis depends on the analysis itself and an assessment of the extent to which recent experience is a guide to the future.
- 5.2 Where other information is considered as part of the process of agreeing assumptions for the valuation such information is discussed within the report providing our advice on those assumptions.





## **Appendix A: List of funds from which data was requested**

The funds from which data was requested are listed below:

Avon Pension Fund  
Bedfordshire Pension Fund  
Bexley London Borough Pension Fund  
Buckinghamshire County Council Pension Fund  
Cambridgeshire County Council Pension Fund  
Cardiff & Vale of Glamorgan Pension Fund  
Cheshire Pension Fund  
City of London Corporation Pension Fund  
Clwyd Pension Fund  
Cornwall Pension Fund  
Cumbria Local Government Pension Scheme  
Cyngor Gwynedd Council Pension Fund  
Derbyshire County Council Pension Fund  
Devon County Council Pension Fund  
Dorset County Pension Fund  
Durham County Council Pension Fund  
Dyfed Pension Fund  
East Riding Pension Fund  
East Sussex Pension Fund  
Environment Agency Active Pension Fund  
Environment Agency Closed Pension Fund  
Essex Pension Fund  
Gloucestershire County Council Pension Fund  
Greater Gwent (Torfaen) Pension Fund  
Greater Manchester Pension Fund  
Hampshire County Council Pension Fund  
Hertfordshire County Council Pension Fund  
Isle of Wight Council Pension Fund  
Islington Council Pension Fund  
Kent County Council Pension Fund  
Lancashire County Pension Fund  
Leicestershire County Council Pension Fund  
Lincolnshire County Council Pension Fund  
London Borough of Barking and Dagenham Pension Fund  
London Borough of Barnet Pension Fund  
London Borough of Brent Pension Fund  
London Borough of Bromley Pension Fund



London Borough of Camden Pension Fund  
London Borough of Croydon Pension Fund  
London Borough of Ealing Pension Fund  
London Borough of Enfield Pension Fund  
London Borough of Hackney Pension Fund  
London Borough of Hammersmith and Fulham  
London Borough of Haringey Pension Fund  
London Borough of Havering Pension Fund  
London Borough of Harrow Pension Fund  
London Borough of Hillingdon Pension Fund  
London Borough of Hounslow Pension Fund  
London Borough of Lambeth Pension Fund  
London Borough of Lewisham Pension Fund  
London Borough of Merton Pension Fund  
London Borough of Redbridge Pension Fund  
London Borough of Richmond Pension Fund  
London Borough of Southwark Pension Fund  
London Borough of Sutton Pension Fund  
London Borough of Tower Hamlets Pension Fund  
London Borough of Waltham Forest Pension Fund  
London Pension Fund Authority  
Merseyside Pension Fund  
Newham Pension Fund  
Norfolk Pension Fund  
North Yorkshire Pension Fund  
Northamptonshire County Council Pension Fund  
Northumberland County Council Pension Fund  
Nottinghamshire County Council Pension Fund  
Oxfordshire County Council Pension Fund  
Powys County Council Pension Fund  
Rhondda Cynon Taf County Borough Council  
Royal Borough of Greenwich Pension Fund  
Royal Borough of Kensington and Chelsea Pension Fund  
Royal Borough of Kingston upon Thames Pension Fund  
Royal County of Berkshire Pension Fund  
Shropshire County Pension Fund  
Somerset County Council Pension Fund  
South Yorkshire Passenger Transport Pension Fund  
South Yorkshire Pension Fund  
Staffordshire Pension Fund  
Suffolk County Council Pension Fund  
Surrey Pension Fund



Swansea County Council Pension Fund  
Teesside Pension Fund  
Tyne & Wear Pension Fund  
Wandsworth Pension Fund  
Warwickshire County Council Pension Fund  
West Midlands Pension Fund  
West Midlands ITA Pension Fund  
West Sussex County Council Pension Fund  
West Yorkshire Pension Fund  
Westminster City Council Pension Fund  
Wiltshire Pension Fund  
Worcestershire County Council Pension Fund



## **Appendix B: Actives movement data**

The following data was requested for the inter-valuation period. These items were required to enable an experience analysis to be carried out:

- a. Fund name
- b. Unique identifier
- c. Gender
- d. Date of birth
- e. Date of joining LGPS
- f. Date left
- g. Reason for leaving
- h. Service at leaving
- i. Critical retirement date
- j. Indicator as to whether the member is a Councillor
- k. Pay level
- l. Part-time status
- m. Dependant details (for death in service cases)



## **Appendix C: Deferreds movement data**

The following data was requested for the inter-valuation period. These items were required to enable an experience analysis to be carried out:

- a. Fund name
- b. Unique identifier
- c. Gender
- d. Date of birth
- e. Date of becoming a deferred pensioner
- f. Date ceased being a deferred pensioner
- g. Reason for cessation
- h. Critical retirement date
- i. Indicator as to whether the member is a Councillor
- j. Pension and lump sum entitlements



## **Appendix D: Pensioners and dependants movements data**

The following data was requested for the inter-valuation period. These items were required to enable an experience analysis to be carried out:

- a. Fund name
- b. Unique identifier
- c. Gender
- d. Date of birth
- e. Category of pensioner
- f. Date pension commenced
- g. Date pension ceased
- h. Reason for cessation
- i. Pension entitlement
- j. Dependant details