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Public service pensions: facts and figures

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Summary

The six largest public service pension schemes in the UK – the schemes for the Armed Forces, the Civil Service, NHS, Teachers, Police and Firefighters (which operate on a pay-as-you-go basis) and the Local Government Pension Scheme (which is funded) are statutory defined benefit (DB) pension schemes (i.e. they provide pension benefits based on salary and length of service).

These schemes were reformed under the *Public Service Pensions Act 2013*. Key features of the new schemes included:

- pension benefits based on Career Average Revalued Earnings (CARE).
- a pension age linked to the State Pension age for teachers, local government, NHS and the civil service; a pension age of 60 for members of the schemes for the police, firefighters and armed forces.

Active members of the schemes prior to April 2015 were transferred onto the new schemes, except for those covered by transitional protection for those 'closest to retirement.' A different approach was taken with the Local Government Pension Scheme, where a new scheme was introduced in 2014 and transitional protection provided by means of an 'underpin'. For more detail, see Public service pensions: the 2015 reforms, Commons Library Briefing Paper CBP 5678.

The transitional protection arrangements were found by the Court of Appeal in 2018 to constitute unlawful age discrimination in relation to firefighters and judges. The Government has consulted on a remedy to address this and intends to bring forward primary legislation to implement this and to move all active scheme members to the reformed schemes from 1 April 2022.

The aim of this note is to provide the facts and figures on public service pensions and sources of additional information.

1. Background

Public sector pension schemes are occupational pension schemes for employees of central or local government, a nationalised industry or other statutory bodies and are established by statute.[1]

The main public service schemes are Defined Benefit (DB) schemes – which provide pension benefits based on salary and length of service.[2]

As discussed in section 2 below, they have recently been subject to two rounds of reform. While reforms by the Labour Government in the mid-2000s increased standardisation,[3] those by the Coalition Government went further, with the *Public Service Pensions Act 2013* setting a common framework,[4] within which regulations set out the detail.

There are differences in the geographical extent of schemes:

- The Armed Forces scheme is UK-wide.
- The civil service has separate schemes for Great Britain and Northern Ireland.
- The rules for the schemes for local government, police and firefighters are set nationally but the schemes are managed and administered locally by LGPS administering authorities, police authorities and fire and rescue authorities respectively.
- There is an NHS and Teachers for England and Wales, with separate schemes in Scotland.

The Scottish Government has power to make regulations governing the detail of how the schemes for NHS, teachers, local government, police and firefighters in Scotland, certain financial and legal restraints (in particular the framework set by the 2013 Act).[5]

The Welsh Assembly has powers in relation to the scheme for firefighters, also within the framework set by the 2013 Act.[6]

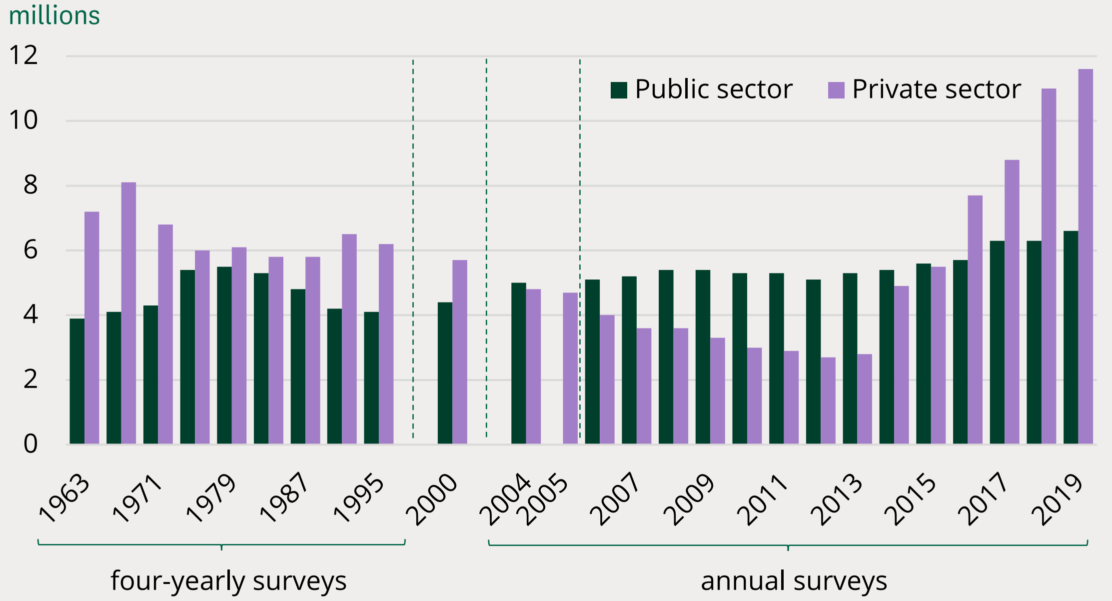
The Northern Ireland Executive agreed the introduction of reforms in line with those for Great Britain and legislated for them in the *Public Service Pensions Act (Northern Ireland) 2014*.

1 *Public Service Pensions Act 2013*
2 The other main type of scheme is defined contribution (DC) in which contributions ae made to a fund that is invested and used to provide an income in retirement
3 Independent Public Service Pensions Commission: interim report, October 2010, chapter 2
4 Independent Public Service Pensions Commission: final report, March 2011, p14
5 *Scotland Act 1998*, schedule 5 (F3); *The Scotland Act 1998 (Transfer of Functions to the Scottish Ministers etc.) Order 1999* (S.I. 1999/1750)
6 *Public Service Pensions Act 2013*, s2, Sch 2; *Government of Wales Act 2006*, section 94 and schedules 5 and 7

2. Trends in public and private sector pension schemes

The number of members of public sector pensions has gradually increased over recent decades. The opposite was true for private pensions until 2012, when auto-enrolment was introduced. This caused the number of members actively contributing to private sector schemes to increase to 11.6 million by 2018. Active participation in public service pensions has also increased, but at a much more modest rate, reaching 6.6 million in 2019.[7]

Active members of occupational pension schemes by sector, UK



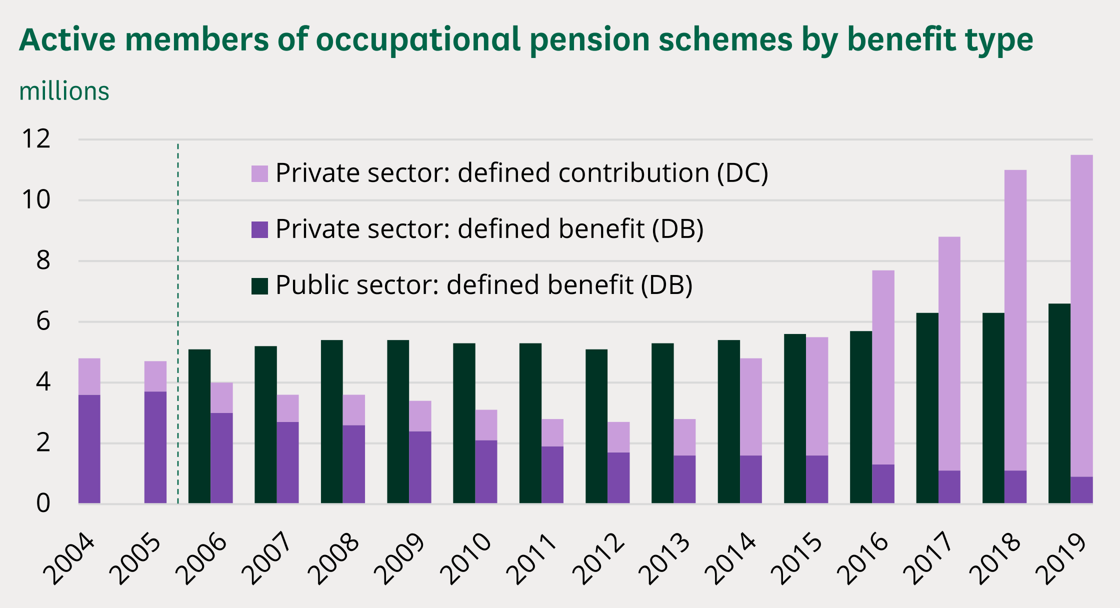
Note: Due to changes in the definition of the public and private sectors, estimates for 2000 and onwards differ from earlier years. From 2000, organisations such as the Post Office and the BBC were reclassified from the public to the private sector. Changes to methodology from 2006 onwards mean comparisons with prior periods should be treated with caution.

Source: ONS Occupational Pension Schemes Survey.

As shown in figure 1b, the increase in active workplace pension participation in the private sector has been in the form of defined contribution (DC) arrangements, whereas active membership of defined benefit DB schemes in the private sector has continued to decline. DC schemes are where contributions are made to a fund that is invested and used to provide an income in retirement.

As of 2019, public sector employees accounted for 87% of all those actively contributing to a DB scheme (6.3 million out of 7.6 million).

[7] Occupational Pension Schemes Survey, UK: 2017, Section 4



Note: Changes to methodology from 2006 onwards mean comparisons with prior periods should be treated with caution. (a) The 2005 survey did not cover the public sector.

Source: ONS Occupational Pension Schemes Survey.

There has been a decline in DB schemes in the private sector as companies have become increasingly concerned about building up liabilities to uncertain costs in the future. Liabilities for DC schemes are more certain and typically employer and employee contributions are lower for DC than DB schemes.

Demographic pressures on pension schemes

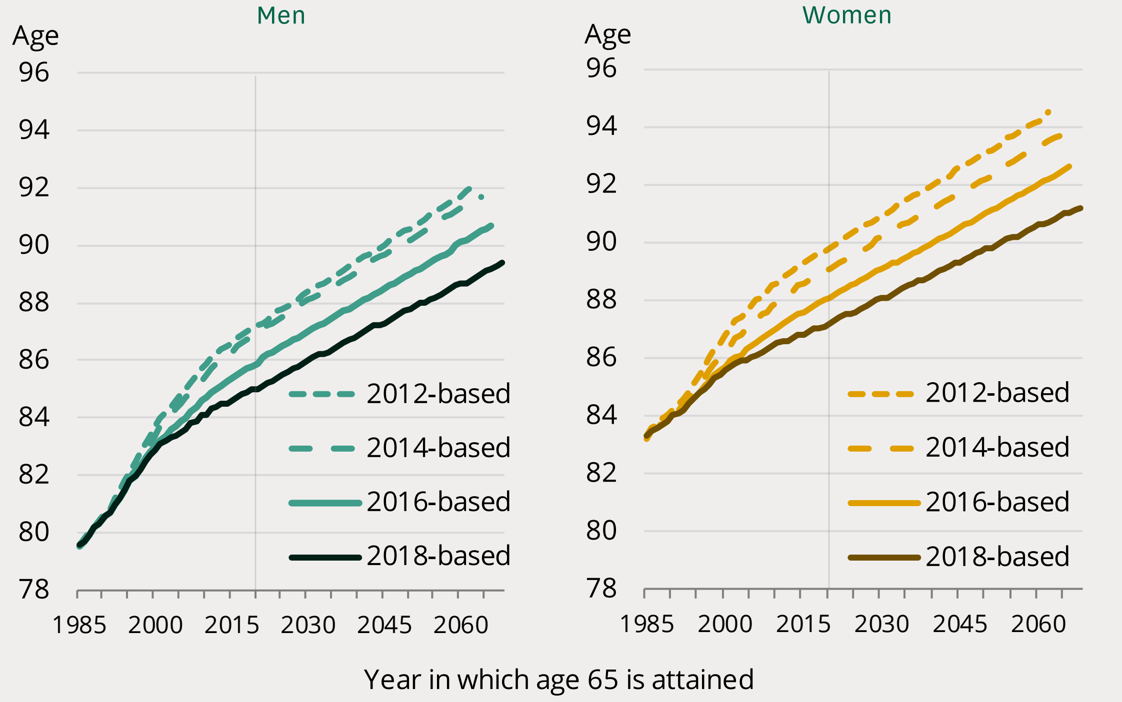
Rising life expectancy exerts a cost pressure on schemes. The latest ONS projections (using data for 2018) show longevity for those reaching age 65 to increase by around 3½ years over the next 40 years. Typically, a 65-year-old man today would expect to reach 85 years old and a woman 87 years. By the 2050s these are projected to be around 88 years for men and 90 years for women.

In each of its last three sets of projections (based on 2014, 2016 and 2018 data respectively) the ONS has revised downwards its projections of improvements in life expectancy, due to higher-than-expected mortality rates (see **figure 2** below).

The Government Actuary's Department (GAD) has cited reductions in projected future life expectancy improvements as the "main driver" behind a reduction in assumed future costs to public service pension schemes in the GAD's 2016-based valuations compared with the previous (2012-based) valuations.[8]

8 GAD 2016-based actuarial valuations of the Teachers' Pension Scheme, Police Pension Schemes and Armed Forces Pension Schemes, pages 7-8.

ONS projections of total life expectancy at aged 65, 1985-2068, UK



Source: [ONS Expectation of life, principal projection, United Kingdom]() - cohort life expectancies.

3. Pension benefit reforms

The main public service schemes are Defined Benefit (DB) schemes.[9] The benefits provided by the scheme have been reformed over the years.

Labour Government reforms

The last Labour Government introduced reforms to public service pension schemes in 2007/08, with the aim of improving financial sustainability and reflecting changes in life expectancy, working practices and the private sector.[10] They included:

- Increases in pension age, mostly for new entrants. For example, in the civil service, NHS and teachers' schemes, existing members kept a pension age of 60, but new entrants had a pension age of 65. Pension ages lower than 65 in the Local Government Pension Scheme would be phased out by 2020. There were also increases in the pension age for members of the schemes for the police, firefighters and armed forces.[11]
- Changed accrual rates for many of the reformed schemes, particularly those for new entrants. However, all schemes continued to provide pension benefits based on final salary, with the exception of the civil service scheme, which introduced a new scheme (nuvos), providing benefits based on career average revalued earnings (CARE) for new entrants from 30 July 2007.[12]

Figures for the average pension in payment from these schemes in 2009-10 are in the interim report of Independent Public Service Pensions Commission (although, as it pointed out, care needs to be taken in interpreting the numbers, as they include part-time workers, people with short service and dependants). Pension payments vary considerably both within and between schemes.[13]

For more detail, see Library Briefing Paper 5298 Public service pension reform – 1997-2010 (November 2010) and RP 12/57 Public Service Pensions Bill (Oct 2012), section 2.

Coalition Government reforms

In its first Budget after the 2010 election, the Coalition Government set up the Independent Public Service Pensions Commission, chaired by former Work and Pensions Secretary, Lord Hutton of Furness to:

> ... undertake a fundamental, structural review of public service pension provision by Budget 2011 and consider the case for short-term savings in the Spending Review period, by September 2010.[14]

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9 In some cases, such as the civil service scheme, there is the option of a Defined Contribution scheme - 'partnership'

10 Department of Trade Industry, Pensions Update – October 2005',

11 Independent Public Service Pensions Commission: Interim Report, 7 Oct 2010, p9

12 Ibid, 7 Oct 2010, Table 1B

13 Ibid, p 26-30; See also NAO, The cost of public service pensions, HC 432, March 2010, Figure 3

14 HM Treasury, Budget 2010, HC 61, June 2010, para 1.42

At the same time, it announced a switch in the measure of prices used for pension increases – from Retail Prices Index (RPI) to Consumer Prices Index (CPI), implemented from April 2011.[15]

In an interim report published in October 2010, the Commission said longer term structural reform was needed, to adopt "a more prudent approach to meeting the cost of public service pensions" and to "strike a fairer balance not just between current taxpayers and public service employees but also between current and future generations."[16]

Its final report, published in March 2011, recommended the introduction of new schemes which would:

- Provide pension benefits based on Career Average Revalued Earnings (rather than final salary); and
- Have a pension age linked to the State Pension age (except for the schemes for the uniformed services (police, firefighters and armed forces), which would have a pension age of 60.[17]

The Government accepted the Commission's recommendations as the basis for negotiation with the trade unions. It announced final proposed agreements for reform of most public service schemes over the period March to October 2012. It legislated in the *Public Service Pensions Act 2013* for a framework for the new schemes introduced for future service from April 2015 (2014 for local government). These schemes are CARE schemes with a pension age linked to the State Pension age (except for the uniformed services). Existing scheme members transferred to the 2015 schemes except for those covered by transitional protection for those 'closest to retirement.'[18]

The Pensions Policy Institute, which looked at the impact of the reforms to the four main schemes (NHS, civil service, teachers and local government) found that they had reduced the average value of the benefit offered across all members of these schemes by more than a third: from 23% of a member's salary to 14%.[19]

Remedy for discrimination in transitional arrangements

When reformed schemes were introduced under the *Public Service Pensions Act 2013*, there were transitional arrangements intended to protect those 'closest to retirement':

- Those within ten years of normal pension age on 1 April 2012 had the option to remain in the relevant legacy scheme;

15 Ibid, para 1.43
16 Independent Public Service Pensions Commission: interim report, October 2011, foreword
17 Independent Public Service Pensions Commission: Final Report, 10 March 2011
18 Ibid, recommendation 4, para 154; For more detail, see Library Briefing Paper CBP 5768 and Library Research Paper RP 12-57 Public Service Pensions Bill (October 2012), section 5.4.
19 PPI, The implications of the Coalition Government's reforms for members of the public service pension schemes, October 2012

- Those within a further four years of pension age on that date could remain in the relevant legacy scheme for a transitional period, the length of which depended on their age.[20]

In December 2018, the Court of Appeal found that these transitional arrangements unlawfully discriminated against younger members of the judicial and firefighters' pension schemes on grounds of age. It required the Government to remedy this unlawful discrimination.[21]

In a written ministerial statement on 15 July 2019, the Government said the Court of Appeal's judgment had implications for all schemes established under the *Public Service Pensions Act 2013*, as all had provided transitional protection arrangements for older members.[22] It would take steps to address the difference in treatment. On 25 March 2020, it confirmed that it would do so for all members with relevant service, not just those who had lodged a legal claim.[23]

Following consultation, the Government said on 4 February 2021 that it intends to bring forward new primary legislation as soon as practicable to:

- Give eligible public service pension scheme members the choice whether to take legacy or reformed scheme benefits for the 'remedy period' (1 April 2015 to 31 March 2022). They would exercise this choice when their pension benefits become payable. Members of the reformed scheme who have retired before implementation will be offered the choice as soon as practicable.[24]
- Provide for all active scheme members to build up benefits in the relevant reformed scheme from 1 April 2022.[25]

20 *Public Service Pensions Act 2013*, s18
21 Lord Chancellor and another v McCloud and others, Secretary of State for the Home Department v Sargeant and others [2018] EWCA Civ 2844
22 HCWS 1725, 15 July 2019
23 HCWS 187, 25 March 2020
24 HM Treasury, Public service pensions consultation: changes to the transitional arrangements to the 2015 schemes, Updated 4 February 2021
25 Ibid

4. How are pensions funded?

The main difference between defined benefit (DB) pension schemes in the public and private sectors lies in the funding arrangements.

Most private sector DB schemes are funded, meaning that contributions from employees and employers are paid into a fund, which is invested, and from which the cost of pension benefits is met. To help ensure they have sufficient assets to pay out pensions when they are due, they are required to conduct regular valuations and are subject to funding requirements overseen by the Pensions Regulator.[26]

Most of the main public service pension schemes - the exception is the Local Government Pension Scheme (LGPS) - are unfunded. They operate on a Pay as You Go (PAYG) basis.

These different funding arrangements within the public sector are to some extent the result of historical development. David Blake, for example, notes that:

> ... with the exception of the civil servants' scheme, all public sector schemes have developed since 1920; in 1919 a committee, in discussing local authority schemes, happened to recommended that these should be funded and they have been ever since.[27]

The Independent Public Service Pensions Commission reviewed the funding arrangements but recommended no change to the existing arrangements. It concluded it was reasonable for the existing PAYG public service schemes to continue to operate without actual funds:

> Ex.24 The Commission has also come to the conclusion that it remains reasonable to continue to operate arrangements without actual funds as the basic financing model, given the risks, lack of obvious economic benefit and transition costs of moving to a fully funded model. Equally, there is no reason to de-fund existing funded schemes.[28]

It also considered whether the LGPS should move to an unfunded model as a way of removing investment return volatility and releasing cash in the short term but decided against this on the grounds that:

> [...] this might reduce employers' and funds' ability to adjust recovery periods and other assumptions, in order to limit immediate LGPS valuation pressures on employer contribution rates and Council Tax. Also, if such relaxation of funding requirements were applied to private sector admitted bodies such as contractors and charities and other non-profit making organisations, of which there may be several thousand in the LGPS, it would be equivalent to providing a new Government subsidy for the DB pensions of these private sector employers with the Government having limited control over the risk. It would also

[26] For more detail, see Defined benefit pension scheme funding, Commons Library Briefing Paper, CBP 4877, July 2020
[27] David Blake, Pension schemes and pension funds in the United Kingdom, 2003, page 384
[28] Independent Public Service Pensions Commission: Interim Report, 7 October 2010

> contrast with the regulatory requirements placed on other private sector employers who were offering DB schemes to employees.[29]

4.1 Pay as you go (PAYG) schemes

Most of the main public service schemes operate on a PAYG basis, meaning that there is no fund of assets which is invested and from which pension benefits are paid. Contributions from employers and employees are paid to the sponsoring government department. These contributions are not invested. Instead, the sponsoring government department pays benefits to pensioner members, netting off the contributions received. Total contributions and payments to current pensioners are not designed to balance – they relate to different populations. HM Treasury makes an annual balancing payment to schemes to cover any shortfall (and retains any surplus).[30]

Contributions

In most cases, both employers and employees contribute to their pensions. The main exception is the Armed Forces Pension Scheme, which is non-contributory for members, although pension benefits are taken into account when pay is assessed.[31] Until April 2012, members of two further schemes (the *classic* section of the civil service scheme and the judicial pension schemes) only paid contributions towards survivor benefits. However, they now also contribute to personal benefits.[32]

Employee contributions

The Coalition Government increased member (employee) contributions by 3.2% across public service pension schemes (except for the armed forces) over the period 2012/13 to 2014/15.[33] This followed the Independent Public Service Pensions Commission's recommendation that this was the most effective way of making Exchequer savings in the short-term. The rationale was "to ensure a fairer distribution of costs between taxpayers and members."[34]

The NAO said that as a result, members now contribute substantially more to their pensions both individually and in total:

> In 2019-20 total employee contributions from the four largest pay-as-you-go schemes amounted to £8.2 billion, 44% higher than 2009-10 (in real terms). On average, employees contributed around £2,700 in 2019-20 to their pensions, 33% higher in real terms than in 2009-10, and around 8.5% of average salaries in 2019-20. These increases in employee contributions are in the context of average pay decreasing 12% in real terms over the

29 Ibid, p84
30 NAO, Public service pensions, HC 1242, March 2021
31 AFPS 05, *Your Pension Scheme Explained*, (MMP/124, re-issued January 2007)
32 Cabinet Office, Principal Civil Service Pension Scheme – Consultation on proposed increases to employee contribution rates effective from April 2012 – Government response, 15 December 2011; HC Deb, 8 March 2012, c72-3
33 HM Treasury, Spending Review 2010, October 2010, para 1.94; For more detail, see Library Note SN 6137 Public service pension contributions (April 2012)
34 Independent Public Service Pensions Commission: Interim Report, Oct 2010, ch 8

> same period (to £31,600 in 2019-20), as prices increased faster than total pay.[35].

Employer contributions

Employer contributions are set following regular actuarial valuations. The purpose is to ensure that contributions are set at a level to reflect the future value of benefits being earned, so that the full costs of the scheme are taken into account when financial decisions are made by employers.[36]

Employer contributions across the four main public service pension schemes[37] increased from 15.9% in 2009-10, to 24.3% in 2019-20.[38] This was "largely the result of a change to the discount rate government used to estimate the current cost of future benefits to be paid out by the schemes. This increase is consistent with HM Treasury's intention for departments and other public service employers, who control staffing decisions, to bear the full cost of those decisions."[39]

Any changes to employer contribution rates resulting from the 2020 valuations are to be implemented in April 2024.[40]

A discount rate is a figure used to convert a stream of future payments to a single 'net present value.' The Government sets this 'SCAPE rate' with the aim of ensuring that current contributions fairly reflect future pension costs. It is periodically reviewed. Reductions in the rate announced in Budget 2016 and 2018 had the effect of increasing employer contributions (NAO, Public Service Pensions, March 2021, para 2.17

For more background, see Public Service Pensions: employer contributions, Commons Library Briefing Paper, CBP 7539.

4.2 Funded schemes

Of the six main public service schemes, only the Local Government Pension Scheme (LGPS) is funded. The LGPS is made up of 90 funds in England and Wales administered and managed at local level, although the rules are set nationally by the Secretary of State. The Department for Communities and Local Government explains that:

> The assets of the pension funds are for meeting the future pension liabilities of the funds, and are part of the financial corporations sector in the National Accounts, not part of the local government sector. Pensions paid out under the scheme are therefore part of the expenditure of the pension funds, not of the local authorities that administer them. Employers' and employees' contributions, part of the income of the funds, are recorded as expenditure by local authorities in their revenue accounts, either directly or indirectly under employees' expenses.[41]

There is no single set of accounts. Each LGPS fund is subject to a valuation at local level. This is needed to ensure that each fund has sufficient assets to meet its liabilities and to set employer contribution rates. The Scheme Advisory Board explains how the process works:

- Scheme regulations set out when valuations are to be carried out.
- Each LGPS pension fund is required to appoint their own fund actuary, who carries out the fund's valuation. The fund actuary uses a number of assumptions to value the

[35] NAO, Public service pensions, HC 1424, March 2021
[36] HM Treasury, Public service pensions: actuarial valuations and the employer cost cap mechanism, March 2014
[37] NHS, teachers, civil service, armed forces
[38] NAO, Public service pensions, HC 1424, March 2021, para 2.15
[39] National Audit Office, Public service pensions, HC 1242, March 2021, Exec Summ
[40] HM Treasury, Update from the 2016 and 2020 valuations, Feb 2021
[41] CLG Statistical Release, 'Local Government Pension Scheme Funds England 2007-08', 15 October 2008, p8

liabilities of the fund. Liabilities are split between those that relate to the past (the past service cost), and those that relate to the future (the future service cost). The results of the valuation may lead to changes in employer contribution rates for both future and past service costs.

- The portion of the total employer contribution which relates to the past service cost is known as the deficit contribution, and is often payable in cash terms. The portion of the total employer contribution which relates to the future service cost is known as the future service rate and is normally payable in percentage of pay terms.[42]

Other funded public service schemes include the scheme for Members of Parliament – the Parliamentary Contributory Pension Fund (PCPF).[43]

4.3 Liabilities

The accounts for the individual schemes include estimates of their total liabilities. These are an estimate of the net present value of pension benefits accrued to the relevant date and due to be paid out over a period of 60 to 70 years to surviving public service employees, former employees and surviving dependants.

Although they both reflect the same future benefit payments, the liability figures in scheme accounts differ from those in the regular scheme valuations, due to different timing cycles and financial assumptions, in particular the discount rate. The Government explains:

> 1.69 The valuations of the pension schemes use a different discount rate and different assumptions for CPI and salary growth (known collectively as the "financial assumptions") to the accounts and, as explained above, this causes differences in the liability figures. The financial assumptions used in the accounts are based on market conditions close to the effective date of the accounts, while the valuations use more stable financial assumptions including a discount rate (known as the SCAPE rate) linked to the OBR's expected rate of long-term GDP growth, which is reviewed at least every five years.[44]

The total liability figure in scheme accounts is highly sensitive to changes in the discount rate. However, the discount rate does not affect the future benefits payable:

> 1.59 Annual changes in the discount rate drive changes in the public sector pension liability, but setting aside future CPI growth, the discount rate does not affect the future benefits payable.
>
> 1.60 As the liability represents commitments to make future benefit payments to both current and historic workforces the underlying drivers of the liability (besides the discount rate) are the assumptions for CPI growth and salary growth (which affect how much an individual is expected to receive), life expectancy (how long payments are expected to be made for) and workforce size (the number of people expected to receive payments).[45]

42 LGPS Advisory Board – 2016 valuations - summary
43 For more detail, see Library Briefing Paper SN 6283 MPs' Pension Scheme
44 Whole of Government Accounts 2016-17, June 2018, para 1.69
45 Ibid para 1.55-60

The Government therefore focuses on other measures to assess the affordability of public service pensions:

> As the discount rate has no bearing on the future benefits payable, the government focuses on other measures to assess the affordability of the public sector pension schemes and to manage the associated fiscal risks. For example, when monitoring the fiscal implications of the schemes the government considers the OBR's long-term projections of public sector pension scheme expenditure published in their Fiscal Sustainability Reports, which looks at the future benefits payable as a percentage of GDP.[46]

The Government explained that over three quarters of the public service pension scheme liability relates to the four largest (unfunded) schemes – those for the armed forces, civil service teaches and the NHS. The figures for 2018/19 are set out in the table below:

UK defined benefit public service pension scheme balance sheet

	2018/19 Scheme liabilities (a)	2018/19 Scheme assets	**2018/19 Net liabilities**	2017/18 Net liabilities	*Change in scheme liabilities*
	£bn	£bn	**£bn**	£bn	*%*
Unfunded schemes					
NHS (UK)	620.1	-	**620.1**	612.6	*+1.2*
Teachers (UK)	411.0	-	**411.0**	412.9	*-0.5*
Civil Service (UK)	261.1	-	**261.1**	260.9	*+0.1*
Armed Forces	195.3	-	**195.3**	195.5	*-0.1*
Police (UK)	171.6	-	**171.6**	161.7	*+6.1*
Royal Mail	44.0	-	**44.0**	46.4	*-5.2*
Fire (UK)	31.4	-	**31.4**	29.2	*+7.5*
Other unfunded	21.6	-	**21.6**	22.6	*-4.4*
Unfunded schemes: total	1,756.1	-	**1,756.1**	1,741.8	*+0.8*
Funded schemes					
Local government (UK)	387.5	-268.0	**119.5**	106.0	*+12.7*
Other funded	100.8	-82.5	**18.3**	17.5	*+4.6*
Funded schemes: total	488.3	-350.5	**137.8**	123.5	*+11.6*
Total: all public service DB	2,244.4	-350.5	**1,893.9**	1,865.3	*+1.5*

Note (a) These figures collate the annual scheme accounts produced in accordance with international accounting standards (IAS). This basis differs from the four-yearly valuations of scheme liabilities conducted by the Government Actuary's Department (GAD) for the purpose of setting contribution rates. The latest set of GAD valuations for unfunded schemes relate to 2016 and set contribution rates for 2019-23. The two valuation methods can produce different liability figures due to differences in financial assumptions used (discount rate, CPI and salary growth). The GAD valuations also calculate 'notional assets' of unfunded schemes, whereas the Whole of Government Accounts only includes actual assets held by schemes (funded schemes only).

Source HM Treasury Whole of Government Accounts 2018-19 note 24 page 150

[46] Ibid para 1.63

In the 2018/19 Whole of Government Accounts, unfunded public service pension liabilities were assessed using a nominal discount rate of 2.9% (equating to a real-terms discount rate of 0.29% net of CPI inflation.[47]

The Office for National Statistics separately estimated unfunded defined benefit liabilities to public sector employees in 2018 at £1.18 trillion based on a 4% nominal discount rate (using the rate set for national accounting purposes by the European statistical agency, Eurostat). This estimate rose to £1.47 trillion if a 3% nominal rate were used instead (closer to the 2.9% rate assumed by HM Treasury).[48]

47 HM Treasury Whole of Government Accounts 2018-19, p100
48 ONS Pensions in the national accounts, a fuller picture of the UK's funded and unfunded pension obligations: 2018, section 5 and figure 2

5. Estimates of costs and liabilities

There are different measures of the costs of public service pensions, which are appropriate for different purposes. Official figures routinely produced include estimated liabilities and net annual expenditure on public service schemes.

5.1 Long-term expenditure as % of GDP

For more on the debate in advance of the 2013 Act on how the costs of public service pension schemes should be measured and presented, see Library Briefing Paper CBP 6183 [Public service pensions – background] (August 2012).

The Independent Public Service Pensions Commission said its preferred measure of the cost of public service pensions was the level of benefit payments as a percentage of GDP. This was because it "can give a good sense of the share of national income that has to be devoted to public service pensions expenditure," enabling a focus on affordability and the associated fiscal risks.[49]

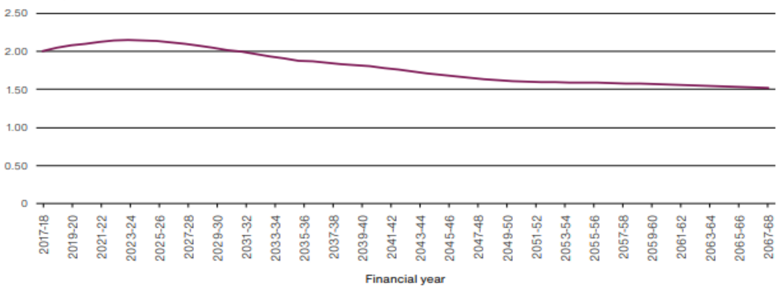
Spending on public service pensions in payment is expected to fall as a percentage of GDP from a peak of 2.1% in 2022-23, to around 1.5% of GDP from 2064-65 onwards, reflecting both the 2011-2015 reforms and reductions in the public sector workforce. The forecasts had been made before the COVID-19 pandemic and the impact of EU exit:

> 2.22 The OBR's latest projections published as a part of its 2018 Fiscal sustainability report indicate that while gross benefit expenditure will continue to rise in cash terms over the long term, it will fall as a percentage of GDP over the medium and long term (Figure 11 overleaf). Gross benefit expenditure is expected to increase from 2.0% of GDP in 2019-20 to a peak of 2.1% in 2022-23, before reducing over time to around 1.5% of GDP from 2064-65 onwards. These projections are based on assumptions and will differ from the actual outcomes of the schemes. For example, the supporting analysis behind these projections shows that a 0.5% annual increase in the earnings growth assumption would increase pension costs by £14.9 billion in 2067-68 (0.1% of GDP). The projections were made before the COVID-19 pandemic and any impact of EU Exit, both of which have increased the uncertainty around GDP forecasts. The economic impact of climate change also increases the uncertainty of these forecasts.

Figure 11
Projected public service pension costs relative to the size of the UK economy from 2017-18 to 2067-68

Government's 2011–2015 reforms mean that gross benefit expenditure is expected to fall as a percentage of GDP in the long term

Projected gross benefit expenditure as a percentage of nominal GDP (%)



Source: Office for Budget Responsibility projections, produced as a part of its 2018 *Fiscal sustainability report*

> 2.23 The OBR attributes the fall in pension costs over the long term as partly reflecting the 2011–2015 reforms to public service

49 [Independent Public Service Pensions Commission: Final Report], 10 March 2011

pensions introduced since 2010. Over time, an increasing proportion of retiring scheme members will draw on the (cheaper to the taxpayer) reformed pension schemes introduced in 2015, rather than the higher-cost legacy schemes. The OBR also attributes these changes to the reductions in the public sector workforce associated with cuts to departmental spending since 2010. However, this workforce trend has reversed since 2016 owing to the impact of preparing for EU Exit and, more recently, responding to the COVID-19 pandemic.[50]

5.2 Net annual expenditure

In the main public service pension schemes, which operate on a pay as you go (PAYG) basis, employer and employee contributions are paid to the sponsoring government department, which then then pays out benefits to pensioners, netting off the contributions received. The contribution rates are set to meet the cost of accruing benefits, not those of existing pensioners. Payments and contributions are therefore driven by different populations are not designed to balance in any one year. Overall, contributions to mature pension schemes are generally less than pension payments over the long term. In pay-as-you-go schemes, over the long term, Treasury payments reflect the benefit of past alternative use of pension contributions to fund government activities without additional taxation or borrowing.[51]

For this reason, the Independent Public Service Pensions Commission concluded that the net annual expenditure figure was not an appropriate measure of the cost of public service pensions. As well as being inherently volatile, it was "a mismatch between contributions made in respect of future benefits and payments of previously accrued benefits and so provides no insight into long term affordability."[52]

In its March 2021 report, the NAO pointed out that there had been a shift in costs to public service employers, away from HM Treasury's balancing payments, consistent the Government's intention that public service employers should bear the cost of employment decisions.[53]

The table below breaks down public service pension scheme expenditure and receipts for the period 2017/18 to 2023/24.[54]

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[50] NAO, Public service pensions, HC 1242, March 2021
[51] NAO, The cost of public service pensions, HC 432, March 2010, para 2.10
[52] Independent Public Service Pensions Commission: Final Report, Mar 2011, para 1.18
[53] NAO, Public service pensions, HC 1242, March 2021, Executive Summary, para 14
[54] The figures for the 10 years to 2008-09 are discussed in part two of the NAO, The cost of public service pensions, HC 423, March 2010

Public service pension schemes expenditure and receipts							£ billion, nominal (cash) (a)
	Outturn	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Principal Civil Service pension scheme							
Exchequer top-up grant (b)	1.5	1.0	0.7	1.0	1.0	1.0	1.0
Pension scheme expenditure	6.5	6.7	6.8	7.1	7.3	7.6	7.8
Pension scheme receipts	-5.1	-5.7	-6.2	-6.0	-6.3	-6.6	-6.8
of which: Employer contributions	-4.2	-4.6	-5.1	-4.9	-5.2	-5.4	-5.6
NHS pension scheme							
Exchequer top-up grant (b)	-3.0	-4.3	-5.4	-5.4	-5.8	-6.1	-6.5
Pension scheme expenditure	12.0	12.7	12.8	13.1	13.6	14.1	14.5
Pension scheme receipts	-15.1	-17.0	-18.3	-18.5	-19.4	-20.2	-21.0
of which: Employer contributions	-10.1	-11.5	-12.3	-12.5	-13.1	-13.7	-14.2
Teachers' pension scheme							
Exchequer top-up grant (b)	2.7	1.2	1.0	1.4	1.4	1.3	1.3
Pension scheme expenditure	10.3	10.3	10.7	10.9	11.3	11.6	11.9
Pension scheme receipts	-7.5	-9.1	-9.7	-9.6	-9.9	-10.3	-10.6
of which: Employer contributions	-5.1	-6.5	-6.9	-6.8	-7.1	-7.3	-7.6
Armed Forces pension scheme							
Exchequer top-up grant (b)	1.0	1.0	1.1	1.4	1.4	1.5	1.5
Pension scheme expenditure	4.9	5.0	5.3	5.5	5.7	5.9	6.1
Pension scheme receipts	-3.9	-4.0	-4.2	-4.2	-4.3	-4.4	-4.6
of which: Employer contributions	-3.8	-4.0	-4.2	-4.2	-4.3	-4.4	-4.6
NHS and teachers pension schemes in Scotland							
Exchequer top-up grant (b)	0.1	0.0	-0.1	0.0	0.0	0.0	0.1
Pension scheme expenditure	2.6	2.8	2.9	3.0	3.1	3.3	3.4
Pension scheme receipts	-2.5	-2.8	-3.0	-3.0	-3.1	-3.2	-3.3
of which: Employer contributions	-1.7	-1.9	-2.0	-2.0	-2.1	-2.1	-2.2
Northern Ireland Executive pension schemes							
Exchequer top-up grant (b)	0.2	0.0	0.0	0.1	0.1	0.1	0.1
Pension scheme expenditure	1.6	1.6	1.7	1.7	1.8	1.8	1.9
Pension scheme receipts	-1.4	-1.6	-1.7	-1.7	-1.7	-1.8	-1.8
of which: Employer contributions	-1.1	-1.2	-1.2	-1.2	-1.3	-1.3	-1.3
LG Police Force pension schemes							
Exchequer top-up grant (b)	1.9	1.0	1.3	1.7	1.7	1.6	1.7
Pension scheme expenditure	3.9	4.0	4.1	4.2	4.3	4.4	4.6
Pension scheme receipts	-2.0	-3.1	-2.8	-2.5	-2.7	-2.8	-2.9
of which: Employer contributions	-1.4	-2.1	-2.0	-1.7	-1.8	-1.9	-2.0
LG Firefighters' pension schemes in England							
Exchequer top-up grant (b)	0.5	0.3	0.4	0.5	0.5	0.5	0.5
Pension scheme expenditure	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Pension scheme receipts	-0.4	-0.6	-0.5	-0.4	-0.4	-0.5	-0.5
of which: Employer contributions	-0.3	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3
Other							
Other net pension expenditure	0.3	0.2	0.1	0.3	0.3	0.2	0.2
Total public service pensions expenditure (c)	**5.0**	**0.4**	**-1.0**	**0.9**	**0.5**	**0.1**	**-0.1**

Source OBR Economic and Fiscal Outlook March 2021, supplementary fiscal table 3.8

Note (a) Positive figures are expenditure (by scheme or Treasury); negative figures are receipts into schemes from contributions or other income.

(b) Exchequer top-up grant is annually managed expenditure (AME) to cover the difference between pension scheme expenditure and pension scheme receipts in each year.

(c) Excludes net public expenditure in respect of Royal Mail pension scheme liabilities.

6. Members

6.1 Scheme membership figures

The table below shows the latest available membership figures for the main public service pension schemes:

Public service pension scheme membership

		Membership type		
	Date	Active	Deferred	Pensions in payment
UK / Great Britain				
Armed Forces Pension Scheme (UK)	Mar 2020	298,760	519,763	442,954
Civil Service Pension Scheme (GB)	Mar 2020	510,220	357,830	700,157
England and Wales				
Teachers Pension Scheme (E&W)	Mar 2019	702,773	638,458	729,471
NHS Pension Scheme (E&W)	Mar 2020	1,619,853	701,348	962,928
Local Government Pension Scheme (E&W)	Mar 2020	1,999,960	1,797,912	1,811,720 ‡
Firefighters Pension Scheme (England)	Mar 2020	32,519	17,309	46,291 *
Police Pension Scheme (England and Wales)	Mar 2016	120,673	27,786	152,020
Scotland				
NHS Superannuation Scheme (Scotland)	Mar 2020	178,092	65,671	110,421
Teachers Superannuation Scheme (Scotland)	Mar 2020	75,633	23,486	82,604
LGPS Scotland	*approx. (a)*	236,000	140,000	169,000
Police Pension Scheme (Scotland)	Mar 2016	16,599	3,530	16,492
Firefighters Pension Scheme (Scotland)	Mar 2016	5,580	1,518	5,304
Northern Ireland				
Civil Service (NI)	Mar 2020	29,265	8,682	31,668
Local Government (NI)	Mar 2020	68,153	32,316	38,579
Teachers (NI)	Mar 2020	25,177	16,345	24,523
Firefighters (NI)	Mar 2020	1,673	299	1,376

Sources

UK/GB: Civil Superannuation Resource Accounts; AFPS Annual Accounts

England and Wales: Teachers' Pension Scheme (E&W) Annual accounts;NHS Pension Scheme Resource Accounts; LGPS E&W statistics (*Note* ‡ pensioner total includes a small number of 'flexible retirees'); Fire statistics data table FIRE1304 firefighters' pension membership (*Note * pensioners* includes age retirement and ill-health retirement pensioners)

Scotland: NHS Superannuation Scheme (Scotland) Accounts; Scottish Teachers' Superannuation Scheme Accounts; Scottish Public Pensions Agency (LGPS, police, firefighters' schemes) **(a)** LGPS membership figures undated, accessed from website in April 2021

Northern Ireland: NICS Pension Board Annual Report; NILGOSC Annual Report; Teachers' Pension Annual Scheme Statement; NI Fire and Rescue Service Annual Report and Accounts.

6.2 Pensions in payment

In its March 2021 report, the NAO commented total payments from the four largest unfunded public service pension schemes had increased by 105% in real terms (an increase of £17.1 billion) over the past 20 years, although growth had reduced in recent years. The main factor driving this was the increasing number of pensioners, driven by trends in past public sector employment, as those who had started their careers 40 to 45 years ago reached retirement age, and the extension of pension rights for early leavers and women. This accounted for £10.1 billion of the £17.1 billion real terms increase since 1999-2000. The average annual pension had was approximately 7% higher in real terms than it was 10 years ago and 16% higher in real terms than 20 years ago. While future pension benefits had been affected by the 2015 reforms, these changes would take many years to have an effect:[55]

Figure 6

Pensions paid from the four largest UK pay-as-you-go public service pension schemes in 2019-20 compared with 2009-10 and 1999-2000

The average pension across the four schemes has increased 7% in real terms in the past decade

	Number of pensions in payment			Average pension			Pension payments		
Scheme	March 2000	March 2010	March 2020	1999-2000	2009-10	2019-20	1999-2000	2009-10	2019-20
				(£)	(£)	(£)	(£bn)	(£bn)	(£bn)
Armed Forces	335,306	398,446	442,954	8,311	9,487	9,779	2.79	3.78	4.33
Civil Service	552,500	609,700	700,157	6,235	7,366	8,104	3.44	4.49	5.67
NHS	450,900	638,610	962,928	8,050	8,865	9,709	3.63	5.66	9.35
Teachers	344,778	567,671	739,974	13,679	11,986	12,337	4.72	6.80	9.13
All four schemes	**1,683,484**	**2,214,427**	**2,846,013**	**8,659**	**9,365**	**10,008**	**14.58**	**20.74**	**28.48**
Real-terms change (10 years)		32%	29%		8%	7%		42%	37%
Real-terms change (20 years)			69%			16%			95%

Notes

1 The four largest pay-as-you-go public service pension schemes are the: Armed Forces Pension Scheme (covering the United Kingdom), Principal Civil Service Pension Scheme (England, Scotland, Wales and some employees in Northern Ireland), NHS Pension Scheme (England and Wales) and the Teachers' Pension Scheme (England and Wales).

2 Pension payments and average pensions are adjusted to 2019-20 prices using the Consumer Prices Index.

3 Pension payments exclude lump sum payments and include any additional benefits accrued by employees who elected to pay additional voluntary contributions.

4 Figures may not sum owing to rounding.

Source: National Audit Office analysis of pension scheme financial statements

The NAO commented that there was variation on the average pension across schemes driven by factors such as pay, length of service and the accrual rate. For example, members of the Teachers' Pension Scheme receive an average pension of £12,300 compared with £8,100 received by members of the Civil Service Pension Scheme.[56]

55 NAO, Public service pensions, HC 1242, Session 2019-21, March 2021, para 2.4-5
56 Ibid, para 2.6

7. Where to find information

7.1 Armed forces

Armed Forces Pension Scheme

Information for scheme members	Gov.UK – Armed forces pensions Armed forces and reserve forces pension scheme guidance booklets Veterans UK website
Main scheme rules	AFPS 15 regulations AFPS 05 order; AFPS 75 regulations
Scheme data	Annual Accounts 2019 to 2020
Valuations	As at March 2016 As at March 2012

7.2 Civil Service

Civil Service Pension Scheme (GB)

Member guides	Civil Service Pensions website - Members publications
Main scheme rules	Civil service pensions website – scheme rules
Scheme data	Civil Superannuation Accounts, 2019 to 2020
Valuations	As at March 2016

7.3 Teachers

Teachers' Pension Scheme (England and Wales)

Member guides	Teachers' Pensions website
Main scheme rules	*2015 scheme - Teachers' Pension Scheme Regulations 2014 (SI 2014/512)*;1995/2008 scheme - *Teachers' Pensions Regulations 2010 (SI 2010/990)*

Scheme data	Teachers' Pension Scheme: Accounts 2019 to 2020
Valuation	As at March 2016 As at March 2012
Scottish Teachers' Superannuation Scheme	
Information for scheme members	SPPA website; Scottish Teachers' Superannuation Scheme – scheme guide
Scheme rules	Regulations on the SPPA website
Scheme data	SPPA website
Valuation	As at March 2016

7.4 NHS

NHS Pension Scheme (England and Wales)

Information for scheme members	NHS Pensions – Member Hub
Scheme rules	*The National Health Service Pension Scheme Regulations 2015 (SI 2015/94)*
Membership data	NHS Pension Scheme Resource Accounts 2019-20
Valuation	As at March 2016 As at March 2012

NHS Pension Scheme (Scotland)

Information for scheme members	SPPA website
Scheme rules	SPPA website
Scheme data	SPPA website
Valuation	As at March 2016 As at March 2012

7.5 Firefighters

Firefighters Pension Scheme (England)

Member guides	Member guides
Scheme rules	Firefighters Pension Schemes – regulations and guidance
Scheme data	Fire and rescue workforce and pension statistics: England April 2019 to March 2020 Scheme advisory board website
Valuations	As at March 2016 As at March 2012

Firefighters Pension Schemes (Scotland)

Information for scheme members	SPPA website – forms and guides
Scheme rules	SPPA website - regulations
Valuation	The valuation as at March 2016 is referred to here As at March 2012

Firefighters Pension Schemes (Wales)

Information for scheme members	Welsh Government website New firefighters pension scheme 2015
Valuation	As at March 2016

7.6 Police

Police Pension Scheme (E&W)

Information for scheme members	Gov.UK – Police pension schemes
Scheme rules	www.legislation.gov.uk. The main rules for the three schemes are in the following regulations, as amended: (SI 2015/445); (SI 2006/3415); (SI 1987/257)
Membership data	CIPFA (£) for pensions in payment and employer contributions
Valuation	As at March 2016 As at March 2012

Police Pension Scheme (Scotland)

Information for scheme members	SPPA – police pension schemes; forms and guides;
Scheme rules	SPPA - regulations
Valuation	As at March 2016 As at March 2012

7.7 Local Government

Local Government Pension Scheme – England and Wales

Information for scheme members	LGPS website
Scheme rules	LGPS regulations and guidance Scheme advisory board website
Scheme data	LGPS E&W statistics Scheme advisory board website (see for example – results of individual fund valuations 2016)
Valuation	As at March 2016

LGPS Scotland

Information for scheme members	SPPA website

Scheme rules	SPPA website
Membership data	GAD – report on membership data for 2014 valuation
Valuation	As at March 2014

7.8 Northern Ireland

Civil Service Pension Scheme (NI)

Member guides	Civil Service Pensions NI
Scheme rules	PCSPS NI rules See also, NI Civil Service Pensions Board
Membership data	Department of Finance Superannuation and Other Allowances Accounts
Valuations	As at March 2016

Local Government Pension Scheme (NI)

Member guides	NILGOSC website
Membership data	NILGOSC Annual Report
Valuations	As at March 2016

Teachers' Pension Scheme (NI)

Member guides	NITPS factsheets
Scheme rules	Department of Education (NI) – pension regulations
Membership data	Teachers' Superannuation Annual Scheme Statements
Valuation	As at March 2016 As at March 2012

NHS Pension Scheme (NI)

Member guides	HSC Pension Service website – scheme guides
Scheme rules	HSC Pension Scheme Regulations
Valuation	As at March 2016 As at March 2012

Police Pension Scheme (NI)

Member guides	NI Policing Board website

Firefighters Pension Scheme (NI)

Scheme rules	NI Fire and Rescue Service website
Membership data	NIFRS Annual Report and Accounts

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