



The Pearson Pension Plan

**Plan funding report on the actuarial valuation as
at 1 January 2021**

25 January 2022

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Throughout the report:

'Plan' refers to the Pearson Pension Plan

'Trustee' refers to the Trustee of the Pearson Pension Plan

'Company' refers to Pearson Services Limited and other participating employers

Disclaimers, confidentiality and non-disclosure

This report has been commissioned by and is addressed to the Trustee of the Pearson Pension Plan. The intended user of this report is the Trustee and it is for its exclusive use. Its scope and purpose is to provide the Trustee with the final results of the Plan's funding valuation as at 1 January 2021 and to satisfy the legislative requirements of reporting and certifying the results of the valuation. I am providing this report under the terms of our engagement and in my capacity as Plan Actuary.

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Executive Summary

104%

Funding Level

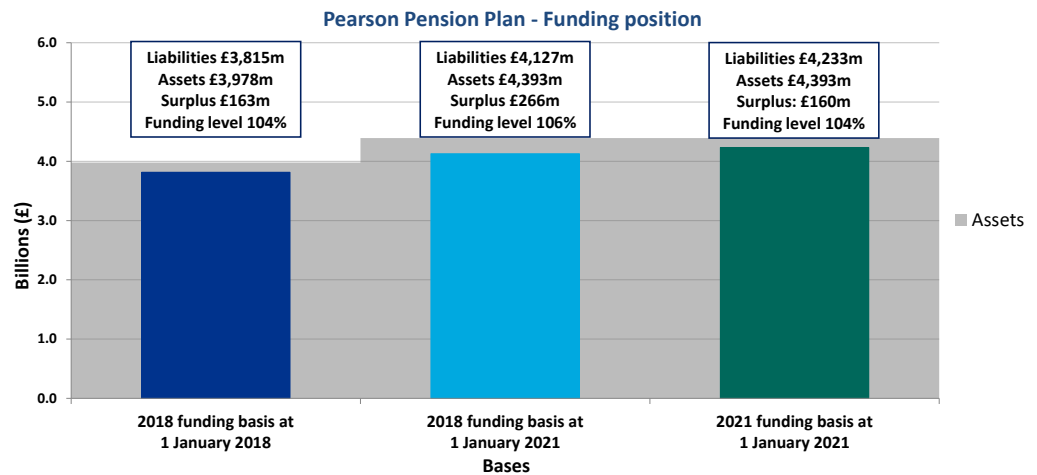
£160m

Estimated Plan
funding surplus

The Trustee has completed a valuation of the Plan as at 1 January 2021. This report sets out the approach adopted by the Trustee, the results obtained and the actions taken in the light of those results. The key results are as follows.

Plan funding assessment

In funding the Plan, the Trustee's key objective is to ensure that there will be sufficient assets to meet all benefit payments as they fall due. With this in mind, the Trustee has set a target reserve for the Plan based on a prudent estimate of the amount needed to meet all payments in respect of the benefits earned up to the valuation date.



Company contributions

Future accrual

The Company will pay contributions to the Plan in respect of future accrual for active members at the following rates:

Final salary section

62.5% of Pensionable Salary per annum.

Money Purchase 2003

The employer will pay twice the member's contribution rate as a percentage of Pensionable Salary.

Auto Enrolment

3.0% of Qualifying Earnings per annum. This rate will be increased if and when required to satisfy the minimum Auto Enrolment requirements.

Expenses

Contributions to meet the cost of any risk-based levy payable to the Pension Protection Fund will be paid to the Plan within 28 days of the Plan receiving a levy invoice requiring payment of such levy. Other levies are payable directly from the Plan.

Full details are set out in the schedule of contributions and recovery plan included within Appendix E.

Executive Summary

continued

94%

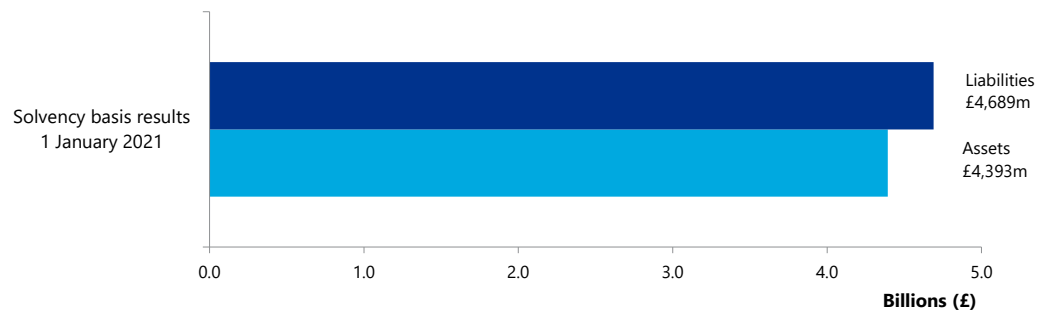
Solvency funding level

£296m

Estimated solvency deficit

Solvency assessment

I have also completed a solvency assessment of the Plan. This estimates the extent to which the Plan's assets would be sufficient to secure members' benefits by the purchase of insurance policies if the Plan were to be wound up at the effective date of the valuation.



131%

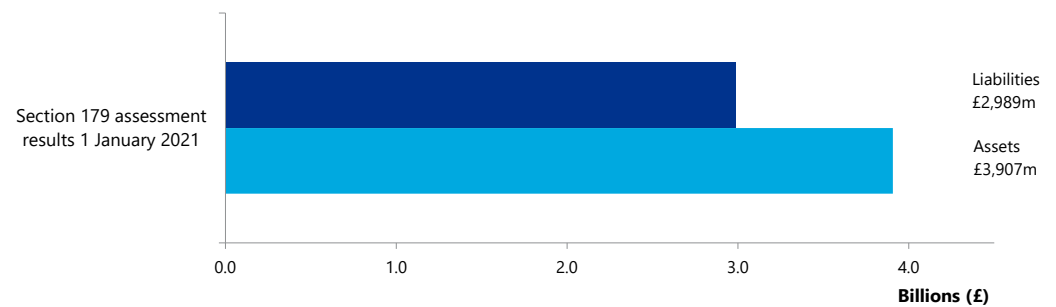
Section 179 funding level

£918m

Estimated section 179 surplus

Section 179 assessment

I have completed a section 179 assessment of the Plan. Once submitted, the Pension Protection Fund (PPF) will base the Plan's levy on the results of this valuation.



01 Introduction

This report should be made available to the Company within seven days of receipt

The actuarial results must be submitted to the Pensions Regulator within ten working days of the schedule of contributions being certified.

Background

The Trustee of the Plan has undertaken a formal valuation of the Plan as at 1 January 2021.

I have already provided the Trustee with all of my advice in relation to the valuation, including the results, in a number of previous reports, letters and presentations. The purpose of this report is to set out in one place the final results of the valuation and to satisfy the legislative requirement for reporting and certifying the results of the valuation, within 15 months of its effective date.

The report is addressed to the Trustee. Legislation requires the Trustee to make it available to the Company within seven days of receipt.

The following documents are relevant to the results in this report:

- > Willis Towers Watson's report "Actuarial valuation as at 1 January 2018" dated 22 November 2018.
- > The Trustee's "Statement of Funding Principles" dated 22 November 2018.
- > My report "Plan funding 1 January 2020" dated 11 May 2020, which sets out proposed assumptions for the Actuarial Report as at 1 January 2020.
- > My report "Actuarial Report as at 1 January 2020" dated July 2020.
- > My report "1 January 2021 Valuation Scene Setting" dated 21 September 2020.
- > My terms of reference letter "Actuarial valuation as at 1 January 2021 – planning" dated 12 October 2020.
- > My slides "Valuation Working Party preparation for the 1 January 2021 valuation" presented on 3 February 2021.
- > My slides "1 January 2021 Valuation Update" presented on 3 March 2021.
- > My slides "Valuation Working Party – Preliminary results of the 1 January 2021 Valuation" presented on 10 May 2021.
- > My slides "Reference Scheme Test valuation and scenario testing" prepared for the Trustee Strategy Day on 30 June 2021.
- > My slides "Summary of valuation results for Pearson" sent to the Company in July 2021.
- > My report "Valuation update September 2021" dated September 2021.
- > My report "2021 Valuation: Assumptions update" dated 4 November 2021.

02 Funding objectives and assumptions

The methodology used in deriving the assumptions are described in detail in the statement of funding principles, dated 20 January 2022

Tending to strong Company covenant

Trustee has adopted a working assumption that the Company covenant is tending to strong

The funding objective

The key funding objective for the Trustee is to ensure that there will be sufficient and appropriate assets to cover its technical provisions (value of the liabilities on the Plan's funding assumptions).

Trustee's long term funding target

The Trustee also aims to achieve full funding on a long term funding target using discount rates based on the Bank of England ("BoE") gilt nominal curve, which has been extended beyond 40 years, with no margin applied. All other assumptions are consistent with the Plan's technical provisions basis with the exception of the allowance for GMP equalisation of 0.75% of liabilities, an expense reserve of £119m for administration and other non-investment expenses, more prudent mortality improvement assumptions and no allowance for members taking transfer values at retirement. The Company is aware of the Trustee's long term target, however this is not a formal subsidiary objective.

Method and assumptions

In carrying out the valuation of the Plan, a number of assumptions need to be made. For the Plan funding valuation the method and assumptions are set out in the Trustee's statement of funding principles dated 20 January 2022, which has been agreed with the Company. The statement of funding principles is included in Appendix E.

Company covenant

The Plan is supported by the covenant of the Company. Generally speaking, covenant is the extent of a sponsor's obligation and financial ability to support its pension scheme now and in the future. The sponsor's covenant underwrites the risks to its pension scheme.

An assessment of the covenant of the Company was carried out for the Trustee by Interpath in July 2021. This incorporated a review of the Company's detailed financial projections for 2021 as well as longer term projections and its wider activities.

The Trustee concluded that the Company's covenant is broadly unchanged since the 1 January 2018 valuation and is considered to be tending to strong. As the covenant assessment is on financial projections over the next 3 years, the assessment is subjective and the covenant strength may change in the future.

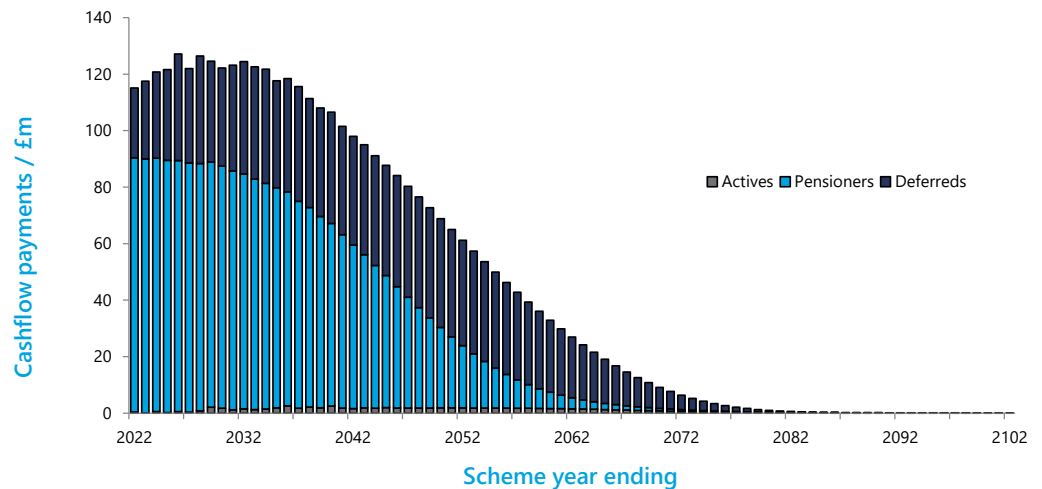
03 Plan funding results

2026

Projected peak of Plan benefit payments

Projected benefit payments

I have used the Plan funding assumptions to project the estimated benefits that will be paid to all members in respect of their entitlements at the valuation date. These projections are set out in the chart below and represent all cash payments expected to be made over the lifetime of the Plan.



2046

Last member expected to retire

The Plan is made up of those members who have already retired (pensioner members) and those who have not yet retired (active and deferred members). The last member is expected to retire in 2046, at which point the benefits of all members will be in payment.

This projection is based on Defined Benefit members of the Plan only, i.e. excluding members in the Money Purchase 2003 (MP03) Section. Due to the lower average age of the MP03 Section, a large proportion of those members are expected to retire later than 2046 and in theory indefinitely as the Section is still open to new members.

The projected cashflows are calculated on the Plan funding assumptions and are therefore dependent on these assumptions being realised.

The level of benefits paid will depend on:

- > the actual level of future inflation compared to that assumed (which affects salary increases and increases to pensions in deferment and in payment).

The timing of the cashflows will be dependent on factors such as:

- > how long members and dependants live compared to assumed;
- > whether members take cash at retirement (it is assumed that members commute 18% of their pension into cash at retirement);
- > whether members retire early or late; and
- > members transferring out their benefits from the Plan (10% of members are assumed to take a transfer value at retirement).

Plan funding results continued

The funding position

The Plan assets are compared to the present value of the liabilities to give the funding position at the valuation date below. The corresponding results of the last valuation are shown for comparison purposes.

	As at 1 January 2018 £m	As at 1 January 2021 £m
Past service liabilities		
Active members	92	56
Deferred pensioners	1,285	1,257
Current pensioners	578	334
Insured pensioners	1,190	1,785
Reserves for Barber rectification and GMP reconciliation	19	10
Reserve for GMP equalisation	32	19
Expense Reserve	90	90
Death-in-service and ill-health benefits reserve	20	20
Money Purchase benefits including reserve for guarantees	493	647
AVCs	16	15
Total past service liabilities (L) (‘Technical provisions’)	3,815	4,233
Assets		
Invested	2,222	2,003
Net current assets	109	36
Insured pensioners	1,190	1,785
Money Purchase funds	441	554
AVCs	16	15
Total assets (A)	3,978	4,393
Funding surplus / (deficit) (A minus L)	163	160
Funding level (A as a percentage of L)	104%	104%

£160m

Surplus at
1 January 2021

£3m

Decrease in surplus
over the valuation
period

Plan funding results continued

Some sections of the Plan are still open to future accrual of benefits

£543m

Higher than expected investment returns

£108m

Increase in liabilities due to change in discount rate methodology

Reconciliation with the results of the previous valuation

Since the last valuation, a second pensioner buy-in tranche was undertaken by the Plan which insured another c. £550m of pensioner liability in February 2019.

The funding position has deteriorated slightly since the last valuation but a surplus has been maintained. The most significant influences on the funding position have been as follows:

- > The changes in financial conditions underlying the actuarial assumptions used to value the liabilities have placed a higher value on the liabilities.
- > Returns on the Plan's investments were higher than expected, which offset the higher value placed on the liabilities.
- > The change in approach to setting the discount rates has increased the Plan's liabilities. However, the change brings the post retirement discount rate for non-insured pensioner members into line with the Plan's long term funding target basis and prevents the non-insured discount rate increasing following any future buy-ins.

The full reconciliation of the changes in the Plan's funding position since the valuation carried out as at 1 January 2018 is shown below:

Surplus as at previous valuation date	163
Interest on surplus and changes in market conditions	(470)
Higher than expected investment returns	543
Contributions received less expenses and accrual	(21)
Increase in surplus due to positive investment experience for members with RST underpin pensions	17
Reduction in GMP equalisation reserve	16
Adopting Bank of England gilt curves	(58)
Change to discount rate methodology	(108)
Change in mortality assumptions	44
Increase in RST strain due to updated methodology	(18)
Changes in other assumptions and miscellaneous experience	52
Surplus as at current valuation date	160

Further information on the investment returns and the contributions paid in the period between the two valuations can be found in Appendix C.

Plan funding results

continued

Future service results

The contributions required to fund benefits that are being accrued by in-service members are set out below:

2018

Final salary section	55.0% of Pensionable Salary per annum.
Money Purchase 2003	The employer will pay twice the member's contribution rate as a percentage of Pensionable Salary.
Auto Enrolment	2.0% of Qualifying Earnings per annum increasing to 3.0% from April 2019. This rate will be increased if and when required to satisfy the minimum Auto Enrolment requirements.

2021

Final salary section	62.5% of Pensionable Salary per annum.
Money Purchase 2003	The employer will pay twice the member's contribution rate as a percentage of Pensionable Salary.
Auto Enrolment	3.0% of Qualifying Earnings per annum. This rate will be increased if and when required to satisfy the minimum Auto Enrolment requirements.

Developments since the effective date

Since the effective date of the valuation, 1 January 2021, to the date of this report, financial conditions have fluctuated. Conditions at the date of this report are broadly similar to the valuation date which combined with the high level of hedging means that there has not been a material impact on the Plan funding position since the effective date.

The Trustee and the Company have agreed that they will not explicitly take account of any post-valuation experience. I have therefore, as agreed, certified the schedule of contributions as at the effective date of the valuation, and the certification can be found in Appendix E.

Plan funding results

continued

Projected funding level to the next valuation

I have projected the funding position to 1 January 2024 when the next formal valuation of the Plan is due, when the funding position and future contributions are required to be reviewed again.

I have assumed that experience is in line with the assumptions as set out in the statement of funding principles, Plan assets will achieve returns in line with the best estimate and contributions will be in line with those paid since the valuation date and the newly agreed schedule of contributions.

The results of my estimated projection are shown in the table below.

	Valuation as at 1 January 2021	Projection to 1 January 2024
Ongoing funding level	104%	106%

My projection is for an improvement in the funding position. This projected improvement is principally due to the return on the Plan's invested assets.

In practice the Plan is exposed to a number of risks as set out in the next section, which mean that the funding level at the next valuation date is uncertain.

Risk and prudence

Key Risks

There are a number of risks which might ultimately affect the Trustee's ability to pay benefits to members. Foremost among these are the risks relating to:

- > Funding risks – if experience turns out to be less favourable than was assumed for the funding assessment, for example members living longer than assumed, inflation higher than assumed or legislation introduces unanticipated liabilities, additional contributions are likely to be required from the Company.
- > Company covenant – the Company may become less able to support the Plan, therefore leading to a loss of long-term security and a need to reassess the technical provisions basis.
- > Investment risks – where future investment returns are below those assumed or there is an asset/liability mismatch where an increase in liabilities (e.g. from decrease in bond yields) is not matched by an increase in asset values.

Plan funding results continued

Risk mitigation measures

The Trustee has taken a number of actions to mitigate the risks. These include:

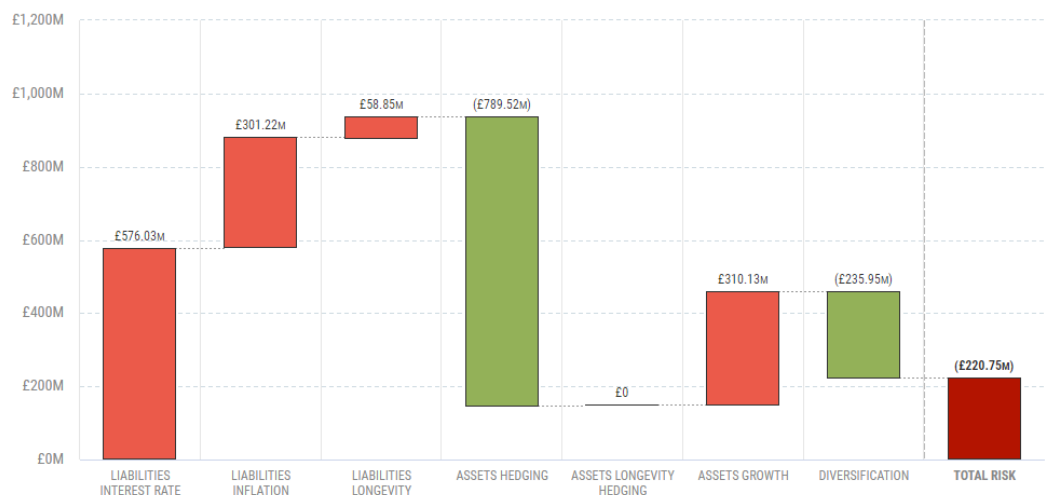
- > Funding - the assumptions used in the funding assessment have been chosen prudently, making it less likely that experience will turn out to be worse than assumed. Buy-in transactions are arranged when appropriate which reduce the Plan's funding risk.
- > Monitoring - regular updates are received by the Trustee to keep abreast of any changes in the Company's covenant and the funding position. More detail can be found in the Plan's integrated risk management plan.
- > Investment – Asset liability modelling is carried out by the Plan's investment consultants alongside the actuarial valuation, in order to better understand and improve the extent that the Plan's assets match the nature of the liabilities. Buy-in transactions are arranged when appropriate which reduce the Plan's aggregate investment risk.

Value at risk

I have carried out a Value at Risk (VaR) analysis for the non-insured liabilities of the Plan with the results over 3 years. At 1 January 2021 the 95% VaR is estimated to be approximately £220.8m. This means that there is a 1 in 20 (5%) chance that the Plan's expected surplus could worsen over a 3-year period by £220.8m. It also shows of the risks measured, interest rate and inflation risks are the most significant. To give the level of interest rate risk shown here, the interest rate would need to fall by approximately 1.1% at all durations.

Whilst the result is dependent on the model used, and therefore absolute values should be viewed as indicative only, this shows the approximate 1-in-20 downside scenario for the Plan's funding level.

Value at risk over 3 years with a 1 in 20 chance



£220.8m

Value at Risk over
next 3 years

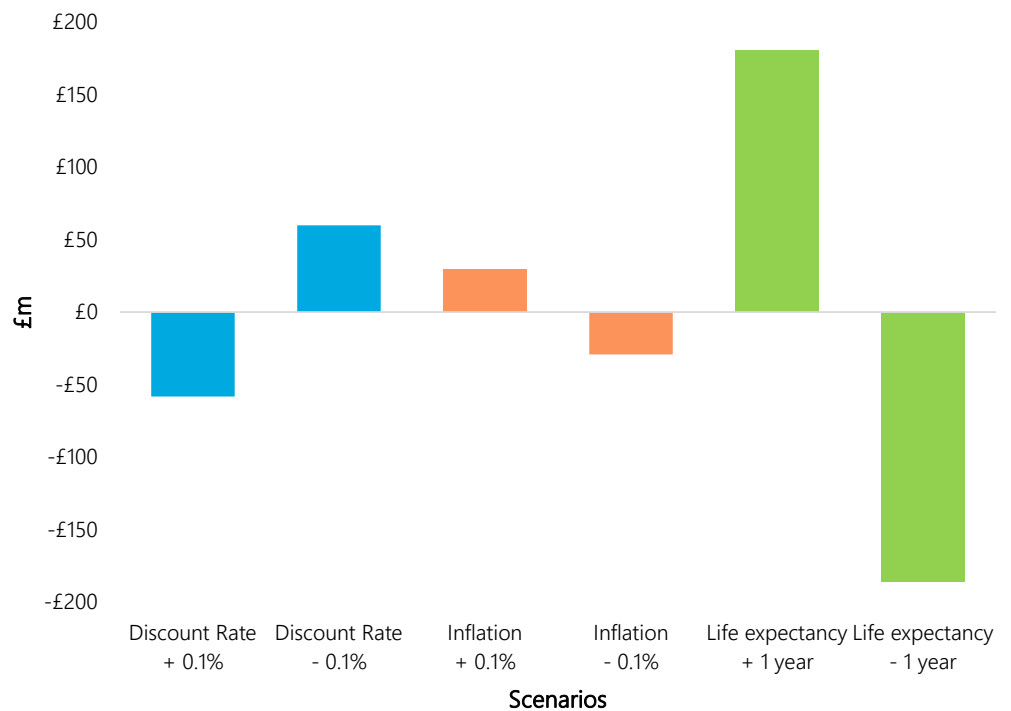
Plan funding results

continued

Sensitivity to assumptions

To give an idea of the extent of some of the key risks, I set out below the sensitivity of the technical provisions to some of the key assumptions. These show the impact on the technical provisions of changing each assumption in isolation. Please note that these calculations are approximate and intended for illustration only.

Impact of change in assumptions on technical provisions



Level of prudence in funding results

The assumptions used in calculating the technical provisions must be chosen prudently, usually including an appropriate margin for adverse deviation.

The Plan's invested assets are expected to generate a return 1.40% per annum above the Bank of England gilt nominal curve. The discount rates used to value non-pensioner and pensioner members on the technical provisions basis assume more prudent investment returns. They assume returns of 0.60% per annum above the Bank of England gilt nominal curve for non-pensioners and in line with the gilt curve for pensioners.

04 Solvency assessment

Background

I am required to assess the winding-up or “solvency” position of the Plan assuming that it ceases at the valuation date, where all benefits would be secured by the purchase of insurance policies. This differs from the Plan funding valuation, which assumes that the Plan operates until its last member dies.

Methodology

The only accurate way to assess the true cost of winding up would be to obtain quotations from a number of insurance companies. I have not done this, but instead have estimated the cost using assumptions that have been derived with reference to general pricing information received from insurers.

Clearly, this approach will not be as accurate as obtaining actual quotations, but I am satisfied that it is sufficient for the present purpose. An actual wind-up, at a different date, could have a significantly different funding position and would depend on investment market conditions and the terms available from insurance companies at the date of securing benefits or obtaining a firm quotation.

While it is difficult to say if my estimate is prudent relative to buy-out terms which might have been available at the valuation date, I have not added explicit margins for prudence. Full details of the assumptions used are set out in Appendix D.

The solvency valuation is also my statutory estimate of the Plan as required under section 7 of the Occupational Pension Scheme (Scheme Funding) Regulations 2005 and I have set the assumptions for the estimate based on the principles set out above

Solvency assessment

continued

£296m

Estimated Solvency deficit at 1 January 2021

Results

The solvency assessment results at the 2021 and 2018 valuation dates (for comparison) is set out below.

	Solvency Assessment at 1 January 2018	Solvency Assessment at 1 January 2021
	£m	£m
Solvency liabilities		
Active members		72
Deferred pensioners		1,720
Current pensioners		333
Insured pensioners		1,785
Reserves for Barber rectification	Breakdown not provided in 2018 report	10
Solvency and payment expenses		20
Reserve for GMP equalisation		31
Money Purchase benefits including reserve for guarantees		703
AVCs		15
Total Solvency liabilities (L)	4,415	4,689
Assets		
Invested	2,222	2,003
Net current assets	109	36
Insured pensioners	1,190	1,785
Money Purchase funds	441	554
AVCs	16	15
Total assets (A)	3,978	4,393
Solvency surplus / (deficit) (A minus L)	(437)	(296)
Solvency funding level (A as a percentage of L)	90%	94%

Comparison to Plan funding results

The funding level on the solvency basis is lower than the Plan funding basis set out in Section 3 of this report. This is due to the different assumptions used to reflect the difference between the anticipated cost of providing the benefits from the Plan on an ongoing basis and the cost of securing those benefits through the purchase of insurance policies.

Solvency assessment continued

The cost of winding-up the Plan is larger than the expected cost of running the Plan on an ongoing basis, due principally, to the more conservative assumptions insurers are required to adopt and the profit margins expected to be targeted by the insurance market.

Projected Solvency funding level to the next valuation

The method and approach taken to projecting the estimated solvency funding level to the next valuation is the same as that used for the projection of the Plan funding level as set out in the 'projected funding level to the next valuation' section on page 13, but using the Plan's solvency basis and best estimate asset returns.

Projected results

The results of my projection of the solvency funding position are as follows.

	Valuation as at 1 January 2021	Projection to 1 January 2024
Solvency funding level	94%	95%

I would expect that the estimated solvency funding level would have improved by the date of the next valuation if the assumptions as set out in the statement of funding principles are borne out in practice and insurance pricing remains unchanged. This is largely because investments are expected to achieve a return in excess of the discount rate used to value benefits on a solvency basis.

Effect on member's benefits

If the Plan had begun winding up as at 1 January 2021, and the Company was unable to pay any of the Company's wind-up debt due to insolvency (i.e. the difference between the assets and the liabilities on the solvency basis), then the Plan would normally be eligible to enter the Pension Protection Fund ("PPF"). In this situation, members' benefits would be reduced to the compensation levels paid by the PPF.

However, as the Plan's assets are greater than the Plan's PPF, or Section 179, liabilities as at 1 January 2021, the Plan would not be expected to enter the PPF. Instead it is likely that benefits in excess of PPF compensation, but below the level of full Plan benefits, would be secured with an insurer.

05 Section 179 valuation

131%

Section 179 funding level

Background

I have carried out a PPF levy (section 179) valuation of the Plan as at 1 January 2021 and enclose, in Appendix F, a copy of my certified results. The assumptions are set by the PPF and are designed to broadly reflect the cost of buying out the PPF benefits with an insurance company. Details on the assumptions used are set out in Appendix D. The information shown in the certificate is to be entered onto Exchange. From there it will be shared with the PPF who will use it to calculate the Plan's annual PPF levy.

Methodology

The PPF prescribes the calculation methodology to be used for the section 179 valuation. This can be found in version G8 of its paper "Guidance for undertaking the valuation in accordance with section 179 of the Pensions Act 2004". I have followed these prescriptions in my valuation. Details of the assumptions used are set out in Appendix D.

I have estimated the value of the Plan's section 179 liabilities as at 1 January 2021 using the same data as used for the Plan funding assessment.

For the purposes of the section 179 valuation I have made an allowance for the potential impact of Guaranteed Minimum Pension ("GMP") equalisation.

I am satisfied that the allowance for GMP equalisation is appropriately prudent for use in the Plan's section 179 valuation. I have therefore included the same allowance in the section 179 valuation as that used in the Plan's technical provisions calculations to allow for the impact of GMP equalisation.

Results

On the section 179 basis, as at 1 January 2021, the Plan had assets of £3,913m and liabilities of £2,989m, equivalent to a funding level of 131% and surplus of around £924m. Further details are provided in Appendix F. This compares with assets of £3,705m and liabilities of £2,774m assessed at 1 January 2018, equivalent to a funding level of 134% and surplus of £931m.

Experience analysis since the previous valuation

The deterioration in the surplus on the section 179 basis is primarily due to changes in financial market conditions and methodology resulting in lower discount rates than last time. In addition, members who have passed their Normal Pension Age since the 2018 section 179 valuation will no longer have a 10% reduction applied to their benefits which will have increased their liability. Furthermore, pensions in payment since 2018 have now received an extra three years of Plan pension increases which are greater than would have been paid in the PPF. However, the deterioration has been partially offset by actual investment returns being higher than expected.

06 Next steps

1 April 2022

Deadline to submit the valuation results to the Pensions Regulator

Next steps

The signing of this document, the statement of funding principles and the schedule of contributions concludes the valuation formalities. The next step is for the details of the valuation to be submitted to the Pensions Regulator.

Between now and the next valuation

The next valuation is due on 1 January 2024. Between now and then I will provide statutory annual reports to the Trustee, setting out how the funding position has evolved and the key reasons for any changes. These reports, along with monthly funding monitoring and regular reviews of the Company's covenant, will enable the Trustee to monitor the funding of the Plan.

Signature

Date

25 January 2022

Name

Steve Leake
Plan Actuary

Qualification

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Appendix A

Plan benefits

The Plan benefits are described in the Plan's General Rules dated 28 June 2013 and subsequent amending deeds and announcements for the Plan, along with Plan section specific trust deed and rules. Summaries of the benefits for the various sections of the Plan can be found on the Plan's website at www.pearson-pensions.com.

Equalisation

With the exception of Guaranteed Minimum Pension (GMP), the Plan appears to comply with the main equal treatment requirements of the European Court and the valuation has been prepared on this basis. I have assumed that these requirements have been validly incorporated in the trust deed and rules and the benefits supplied by the administrators reflect the rules.

However, like many UK pension schemes, the Plan's benefits still differ between men and women because of differences in GMP. My valuation includes a reserve that allows for any additional liabilities that will arise when benefits are equalised to remove these differences for members with GMP.

Discretionary practice

There are a number of areas where the benefits payable are subject to some exercise of discretion on the part of the Trustee and/or the Company, the principal details of which are set out below:

- > Pension increases for some members of the Plan are calculated by reference to a "Price Index" defined in the Rules of the Plan. The Trustee continues to use the Retail Price Index as the appropriate index for this purpose.
- > Depending on the member's Section and when the relevant pension rights accrued, the pensions in deferment or in the course of payment may be guaranteed under the Rules to receive annual increases either at a fixed rate, or in line with price inflation, subject to various minima and maxima. The Trustee and the Company have discretion to increase benefits above this guaranteed level after taking advice from the Plan Actuary. For the purposes of calculating the technical provisions, the Trustee has agreed with the Company that it will be assumed that members will receive only the increases guaranteed in the Rules. On the advice of the Plan Actuary, immediate additional funding from the Company may therefore be required if discretionary increases are awarded in future.
- > At the request of any Participating Employer, and upon payment by that Employer of any contributions that the Trustee (with the advice of the Plan Actuary) may consider appropriate, the Trustee may increase any benefit or provide additional benefits under the Plan. The Trustee and Company have agreed that the award of such discretionary benefits will not be taken into account in advance in the calculation of the technical provisions, but if the Trustee considers it appropriate, the capital value of any such benefits granted would be paid in full by the Company at the time the discretion is exercised.
- > Active and deferred members may retire early subject to Trustee and/or Company consent. Where the terms on which the early retirement pension is granted are not cost neutral to the Plan, allowance is made in the demographic assumptions for members to retire early in line with recent experience.

Plan benefits continued

- > Active and deferred members may convert part of their pension at retirement into cash. The Trustee and Company have agreed that allowance for this should be made within the technical provisions. For the valuation as at 1 January 2021, the amount of pension assumed to be commuted at retirement is in line with recent experience. The assumed commutation terms for calculating the technical provisions and future service contribution rates have been derived using an investment return assumption of 1.5% pa in excess of gilt yields.
- > Members can transfer their benefits out of the Plan by taking a transfer value. The Trustee and Company have agreed that allowance for this should be made within the technical provisions. For the valuation as at 1 January 2021 10% of members are assumed to take a transfer value at retirement, with transfer values being set at 93% of the value of the technical provisions liability.
- > Where the Plan's current treatment of Guaranteed Minimum Pensions is more generous than the minimum that may be required under a strict interpretation of the contracting-out legislation, this practice has been assumed to continue in future.

Plan and legislative developments since the 2018 valuation

There have been no amending deeds implemented since the 2018 valuation. Any changes that are material to the valuation are covered above.

A number of legislative developments have occurred or have been proposed since the 2018 valuation. These developments have been brought to the Trustee's attention where appropriate and are covered in this report where they are relevant to the valuation.

Appendix B

Membership data

15,996

Total Plan membership at current valuation date

I have been provided with membership data as at 1 January 2021 by the Plan's administrators, the Pearson Pensions Team. I have performed a number of checks on the data and I am satisfied that it is sufficiently accurate for the purposes of this valuation. A summary of the data is set out below.

Active – Defined Benefit members	1 January 2018	1 January 2021
Number	126	63
Total Pensionable Salaries (£000s)	7,185	3,666
Average age	50.5	50.3

Actives – Money Purchase 2003 members	1 January 2018	1 January 2021
Number*	2,095	2,254
Pensionable Salary (£000s)	94,863	102,689
Average age	42.6	42.9

* there are also c.850 Auto Enrolment members and c.650 life assurance only members

Deferred members	1 January 2018	1 January 2021
Number*	6,145	5,055
Total annual pension at date of valuation (£000s)	23,913	20,113
Average age	54.2	55.7

* in addition, there were 7,687 deferred members in the Money Purchase section as at 1 January 2021 (7,318 as at 1 January 2018)

16,859

Total Plan membership at previous valuation date

Pensioner members	1 January 2018	1 January 2021
Number*	8,493	8,624
Total annual pension (£000s)	84,455	90,714
Average age	70.6	71.2

* this includes 6,419 insured pensioners with total pensions in payment of £79m as at 1 January 2021 (4,599 with total pensions of £54m as at 1 January 2018)

The average ages shown in the tables above are weighted by liability at valuation date for defined benefit members and by salary at valuation date for active Money Purchase 2003 members.

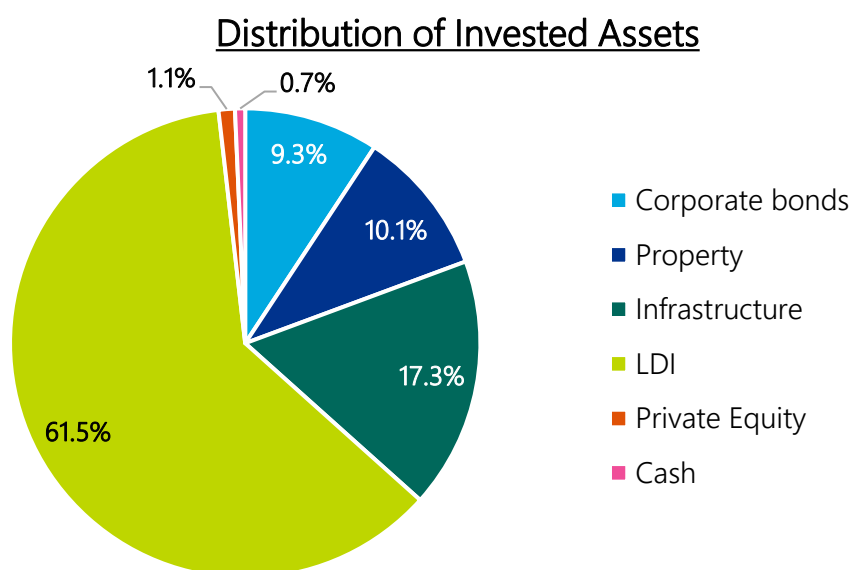
Appendix C

Assets and investment strategy

Assets held at the valuation date

I have taken the value of the Plan's assets from the Trustee's audited Report and Accounts as at 1 January 2021. The accounts state that at that date the Plan had invested assets of £2,003m (excluding AVCs). The following chart illustrates how those assets were invested

Distribution of Invested Assets



In addition to the assets set out above, the accounts show that there were other assets giving a total asset value for use in my assessment, as follows:

	Assets as at 1 January 2018 £m	Assets as at 1 January 2021 £m
Invested assets (excluding AVCs)	2,222	2,003
Net current assets	109	36
Insured pensioners	1,190	1,785
Money Purchase funds	441	554
AVCs	16	15
Total available assets	3,978	4,393

A number of Plan pensions are paid from insurance policies held in the name of the Trustee. In the valuation calculations, I have shown the value of these as both an asset and liability.

4%

Allocation to return seeking assets

47%

Allocation to matching assets

49%

Allocation to insurance policies

Assets and investment strategy

continued

Investment strategy

The assets held at the effective date of the valuation reflected the Trustee's investment strategy, as set out in the Trustee's statement of investment principles dated 23 June 2020. This strategy consists of investing approximately 5% of the assets in return-seeking asset classes, such as infrastructure, and approximately 95% of assets in matching assets, such as bonds, and the Trustee's Insurance Portfolio. This distribution is intended to reflect the liability profile of the Plan and the Trustee will keep the division of assets under review. For the purposes of this valuation the Trustee has instructed me to assume that the distribution of assets will remain unchanged over the immediate future.

As part of the matching fund, the Plan has liability hedging in place. This aims to ensure that adverse movements in the Plan's liabilities due to changes in interest rates and inflation expectations are matched by corresponding movements in the value of the Plan's assets.

Investment returns

The Plan's investments at 1 January 2018 were expected to return 1.0% per annum (based on yields and expectations at the time). The returns over the period averaged 6.5% per annum (and include the movements in LDI assets).

Contributions paid to the Plan

The contributions actually paid between the 2018 and 2021 valuations were as follows:

Year Ending	Employee Contributions		Company Contributions			Total
	Normal Contributions £000s	AVCs £000s	Normal Contributions £000s	Augmentations £000s	AVCs £000s	
31 December 2018	6,242	503	17,526	413	4	24,688
31 December 2019	6,572	1,198	14,883	0	31	22,684
31 December 2020	6,567	1,230	14,112	0	3	21,912
Total	19,381	2,931	46,521	413	38	69,284

Appendix D

Summary of key assumptions

Key financial assumptions – Plan funding basis

As at 1 January 2018	
Discount rate for insured liabilities	WTW Nominal gilt curve
Discount rate for non-insured liabilities	WTW Nominal gilt curve plus 0.68% pa
Future price inflation (RPI)	WTW RPI curve
Future price inflation (CPI)	WTW RPI curve less 1.0%
As at 1 January 2021	
Discount rate for non-pensioners	BoE gilt curve plus 0.6% pa
Discount rate for pensioners	BoE gilt curve
Future price inflation (RPI)	BoE gilt RPI inflation curve
Future price inflation (CPI)	Pre 2030: RPI inflation less 1.0% pa Post 2030: RPI inflation less 0.0% pa

Pension increase assumptions – Plan funding basis

	As at 1 January 2018	As at 1 January 2021
Revaluation of deferred pensions before retirement:	RPI/CPI curves with relevant caps and floors	RPI/CPI curves with relevant caps and floors
Pension increases in payment:	Set with reference to WTW RPI/CPI curves	Set using the assumed rate of inflation and a Black-Scholes model with inflation volatility of 1.5% per annum for RPI linked increases and 1.0% for CPI linked increases

Summary of key assumptions

continued

Demographic assumptions – Plan funding basis

Assumptions	As at 1 January 2018		As at 1 January 2021
	Non-insured liabilities	Insured liabilities	
Base table	SAPS S2 tables	SAPS S2 tables	SAPS S3 tables
Male members – low salary/pension	90% Male pensioners Heavy	90% Male pensioners Heavy	95% Male 97% Female
Male members – high salary/pension	90% Males pensioners Light	90% Males pensioners Light	
Female members	100% Female Normal Health	100% Female Normal Health	
Male spouses	95% Males all	95% Males all	
Female spouses	105% Female Dependants	100% Female Dependants	
Future improvements in longevity	CMI 2017 projections with 1.75% long term improvement, smoothing factor 7.5	CMI 2016 projections with 1.5% long term improvement, smoothing factor 7.5	CMI 2019 projections with 1.5% long term improvement, smoothing factor 7.0 and an initial addition of 0.0%/0.4% for non-insured/insured members
Allowance for commutation	18% of pension commuted at retirement on commutation terms calculated using investment returns of 1.5% above the: WTW nominal gilt yield curve		Bank of England gilt yield curve
Proportion married	Where information was collected as part of a buy-in tranche, actual marital data has been used. Otherwise: 90% of males and 60% of females are assumed to be married at age 62		85% of males and 60% of females are assumed to be married at retirement
Age difference of dependants	Actual date of birth used where available, otherwise assumed that male members are 4 years older than their female spouses and female members are 1 year younger than their male spouses		Actual date of birth used where available, otherwise assumed that male members are 4 years older than their female spouses and female members are 2 years younger than their male spouses
Expenses	Reserve of £90m		Reserve of £90m

Summary of key assumptions

continued

Other assumptions – Plan funding basis

	As at 1 January 2018	As at 1 January 2021
GMP Equalisation allowance	1.0% of liabilities	0.5% of liabilities
RST fund value investment return	WTW gilt curve plus 1% pa	BoE gilt curve plus 2% pa

A description of all the assumptions including their derivation for the Plan funding assumptions is included in the statement of funding principles which is appended to this report.

Summary of key assumptions

continued

Key financial assumptions – Solvency basis (non-insureds)

	As at 1 Jan 2018	As at 1 Jan 2021
Discount rate for non-pensioners	WTW nominal gilt less 0.45% pa	BoE gilt curve less 0.35% pa
Discount rate for pensioners	WTW nominal gilt plus 0.15% pa	BoE gilt curve plus 0.10% pa
Future price inflation (RPI)	WTW RPI curve	Swap RPI curve
Future price inflation (CPI)	WTW RPI curve less 0.5% pa	Pre 2030: RPI less 0.6% pa Post 2030: Equal to RPI

Pension increase assumptions – Solvency basis (non-insureds)

	As at 1 Jan 2018	As at 1 Jan 2021
Revaluation of deferred pensions before retirement:	RPI/CPI curves with relevant caps and floors	RPI/CPI curves with relevant caps and floors
Pension increases in payment:		
RPI max 3%	WTW RPI curve plus 0.65%	Moody's Analytics LPI3 curve
RPI max 5%	WTW RPI curve	Moody's Analytics LPI5 curve
RPI max 5%, min 3%	WTW RPI curve plus 0.45%	Moody's Analytics LPI(3,5) curve
RPI min 4%	WTW RPI curve plus 1.20%	RPI curve with 4% floor
RPI min 0%	WTW RPI curve plus 0.10%	RPI curve with 0% floor

Demographic assumptions – Solvency basis (non-insureds)

Assumptions	As at 1 January 2018		As at 1 January 2021
	Non-insured liabilities	Insured liabilities	
Base table	SAPS S2 tables	SAPS S2 tables	SAPS S3 tables
Male members – low salary/pension	90% Male pensioners Heavy	90% Male pensioners Heavy	95% Male, 97% Female
Male members – high salary/pension	90% Males pensioners Light	90% Males pensioners Light	
Female members	100% Female Normal Health	100% Female Normal Health	
Male spouses	95% Males all	95% Males all	
Female spouses	105% Female Dependants	100% Female Dependants	

Summary of key assumptions continued

Demographic assumptions – Solvency basis (non-insureds)

Assumptions	As at 1 January 2018		As at 1 January 2021
	Non-insured liabilities	Insured liabilities	
Future improvements in longevity	CMI 2017 projections with 1.75% long term improvement, smoothing factor 7.5	CMI 2016 projections with 1.5% long term improvement, smoothing factor 7.5	CMI 2019 projections with 1.5% long term improvement, smoothing factor 7.0 and an initial addition of 0.2%
Allowance for commutation	No allowance		
Proportion married	Where information was collected as part of a buy-in tranche, actual marital data has been used. Otherwise: 90% of males and 60% of females are assumed to be married at age 62		85% of males and 60% of females are assumed to be married at retirement
Age difference of dependants	Actual date of birth used where available, otherwise assumed that male members are 4 years older than their female spouses and female members are 1 year younger than their male spouses		Actual date of birth used where available, otherwise assumed that male members are 4 years older than their female spouses and female members are 2 years younger than their male spouses

Other assumptions – Solvency basis

	As at 1 January 2018	As at 1 January 2021
Allowance for wind-up expenses	0.90% of liabilities	0.50% of liabilities
GMP Equalisation allowance	1.50% of liabilities	0.75% of liabilities
RST fund value investment return	WTW gilt curve plus 1% pa	BoE gilt curve plus 2% pa

Summary of key assumptions

continued

Section 179 valuation basis

The PPF prescribes the assumptions and the calculation methodology to be used for the section 179 valuation and can be summarised as follows.

	As at 1 January 2018	As at 1 January 2021
Version of the guidance for undertaking a valuation in accordance with section 179	G7	G8
Version of the assumptions to use when undertaking a valuation in accordance with section 179	A8	A9

Appendix E

Documents and certificates

Actuary's certificate of the calculation of technical provisions

Name of Scheme: Pearson Pension Plan

Calculation of technical provisions

I certify that, in my opinion, the calculation of the Plan's technical provisions as at 1 January 2021 is made in accordance with regulations under section 222 of the Pensions Act 2004. The calculation uses a method and assumptions determined by the Trustee of the Plan and set out in the statement of funding principles dated 20 January 2022.

..... 25 January 2022

Steve Leake
Fellow of the Institute and Faculty of Actuaries
XPS Pensions
Phoenix House
1 Station Hill
Reading
Berkshire
RG1 1NB

2021 Statement of Funding Principles

The Pearson Pension Plan

This statement has been prepared by the Trustee of the Pearson Pension Plan ("the Plan") for the purposes of the actuarial valuation as at 1 January 2021, to satisfy the requirements of Section 223 of the Pensions Act 2004, after obtaining the advice of the Plan Actuary, Steve Leake ("the Actuary"). The Trustee has discussed and agreed it with the Principal Company; Pearson Services Limited ("the Company"), the agreed representative of all Participating Employers to the Plan.

This Statement replaces the previous Statement dated 22 November 2018.

Statutory Funding Objective

The statutory funding objective is that the Plan should have sufficient and appropriate assets to cover its technical provisions, and this Statement sets out the Trustee's policy for securing that this objective is met.

The Trustee may assume that the Plan will be able to capture part of the expected investment premium available for asset classes other than Government Securities, and may hold investments in other asset classes. The Trustee will though adopt a prudent approach to determining the investment return assumption, in particular considering whether and to what degree margins for adverse deviations should be taken into account in determining the assumption.

In particular, the Trustee will consider what a realistic allowance might be for investment returns in each future year, and will base the funding assumptions on lower returns.

In determining the base table mortality assumptions, the Trustee will take account of both the Plan's recent experience and other analyses of the expected longevity of the membership, for example by postcode. The Trustee will also make a reasonable allowance for possible future improvements in longevity.

Trustee's long term target

The Trustee's aim is to achieve full funding on a long term funding target using discount rates based on the Bank of England ("BoE") gilt nominal curve, which has been extended beyond 40 years, with no margin applied. All other assumptions are consistent with the Plan's technical provisions basis with the exception of the allowance for GMP equalisation of 0.75% of liabilities, an expense reserve of £119m for administration and other non-investment expenses, more prudent mortality improvement assumptions and no allowance for member's taking transfer values at retirement. The Company is aware of the Trustee's long term target, however this is not a formal subsidiary objective.

Technical Provisions

Method

For the purely defined benefits sections of the Plan, the Trustee and the Company have agreed that the technical provisions for the Plan at any given date are to be calculated as the capital value of the prospective benefits arising from service completed before that date, including allowance for prospective salary increases for those members in active service at that date. This method of calculating technical provisions is commonly known as the projected unit credit method.

Money purchase benefits are taken into account at their market value at the valuation date. For the Money Purchase 2003 ("MP03") Section of the Plan the capital value of the prospective defined benefit underpin for each member is calculated in respect of service completed before the relevant date end and, where higher than the member's Money Purchase account, the difference is added to the technical provisions.

For the defined benefit sections of the Plan, the employers' contribution rates, expressed as a percentage of the Pensionable Salary of the relevant members, is the average rate which is expected to be adequate on the assumptions made to meet the cost of benefits earned over the year following the valuation date after allowing for members' required contributions. For the 2021 valuation, a reserve has been included in the technical provisions in respect of death in service lump sum benefits, and ill-health and dependants' benefits, as well as Plan expenses.

Assumptions

A full list of all assumptions that have been used to calculate the technical provisions can be found in Appendix A.

The Trustee and the Company have further agreed that:

- the discount rates used to calculate the capital value of future cashflows will be determined for each future year and expressed relative to the forward rates on the BoE gilt nominal curve;
- the discount rates applied to the pensioner liabilities will be based upon the above gilt curve with no margin applied. This is consistent with the approach used to value the insured assets in the Trustee Report and Accounts and to the extent that the insured benefits match the Plan's liabilities the insured liability will therefore be consistent with the insured asset;
- the discount rates applied to the balance of the liabilities will be prudent estimates which have regard to the expected investment return on the Plan's current benchmark asset allocation but which also reflects more broadly the intention that the technical provisions are set on a suitably low risk basis;
- future price inflation and pension increase assumptions will be set on a realistic basis and take into account information in respect of bond markets and other relevant market information at the effective date of the actuarial valuation; and
- demographic assumptions will have regard to an analysis of recent changes and longer term trends in the Plan membership as well as relevant statistics applicable to similar pension schemes, and the Trustee's and Company's views about how these may change in future. In general, when there is clarity that assumptions are best estimates these will be used, other than for future improvements in mortality where the assumption will be prudent.

The Trustee and the Company have agreed that, in general, the assumptions used to determine the Plan's ongoing contributions required to cover the ongoing accrual of benefits will take into account the funding position at each valuation and be at least a best estimate of the cost of future accrual of the benefits. Note that, as detailed below, in the light of the funding position at 1 January 2021 it has been agreed that for the valuation at 1 January 2021, it is appropriate to adopt best estimate assumptions for the calculation of the contributions.

GMP equalisation

The Lloyds Bank case has clarified that pension schemes are required to adjust member benefits where relevant to reflect the impact on benefits of unequal GMPs. The judgment also includes a method, C2, that should be used to effect this unless agreement is reached with the Company on other, more generous, alternatives. The approach to be adopted by the Plan is not yet known and therefore approximate allowance has been made in the calculations for the adjustments that would be broadly consistent with method C2.

Discretionary Benefits

There are a number of areas where the benefits payable are subject to some exercise of discretion on the part of the Trustee and/or the Company, the principal details of which are set out below:

- Pension increases for some members of the Plan are calculated by reference to a "Price Index" defined in the Rules of the Plan. The Trustee continues to use the Retail Price Index as the appropriate index for this purpose.
- Depending on the member's Section and when the relevant pension rights accrued, the pensions in deferment or in the course of payment may be guaranteed under the Rules to receive annual increases either at a fixed rate, or in line with price inflation, subject to various minima and maxima. The Trustee and the Company have discretion to increase benefits above this guaranteed level after taking advice from the Actuary. For the purposes of calculating the technical provisions, the Trustee has agreed with the Company that it will be assumed that members will receive only the increases guaranteed in the Rules. On the advice of the Actuary, immediate additional funding from the Company may therefore be required if discretionary increases are awarded in future.
- At the request of any Participating Employer, and upon payment by that Employer of any contributions that the Trustee (with the advice of the Actuary) may consider appropriate, the Trustee may increase any benefit or provide additional benefits under the Plan. The Trustee and Company have agreed that the award of such discretionary benefits will not be taken into account in advance in the calculation of technical provisions, but if the Trustee considers it appropriate, the capital value of any such benefits granted would be paid in full by the Employer at the time the discretion is exercised.
- Active and deferred members may retire early subject to Trustee and/or Company consent. Where the terms on which the early retirement pension is granted are not cost neutral to the Plan, allowance is made in the demographic assumptions for members to retire early in line with recent experience.
- Active and deferred members may convert part of their pension at retirement into cash. The Trustee and Company have agreed that allowance for this should be made within the technical provisions. For the valuation as at 1 January 2021, the amount of pension assumed to be commuted at retirement is in line with recent experience. The assumed commutation terms for calculating the technical provisions and future service contribution rates have been derived using an investment return assumption of 1.5% pa in excess of gilt yields.
- Where the Plan's current treatment of Guaranteed Minimum Pensions is more generous than the minimum that may be required under a strict interpretation of the contracting-out legislation, this practice has been assumed to continue in future.
- Approximate allowance has been made within the technical provisions for the expected impact of ongoing data rectification exercises.
- There may be a number of further discretions that enable members to convert the benefit from one form into another, typically at the discretion of the Trustee, and the Trustee and the Company have agreed that these will be allowed for in line with recent experience, where the terms offered create a strain on the Technical Provisions assumptions.

Expenses

Investment management costs are assumed to be met out of future investment income. The valuation discount rate is therefore net of such costs.

For all members of the Plan, administrative and other non-investment expenses (including Pension Protection Fund Scheme Based levies) are allowed for by deriving an expense reserve which broadly reflects the present value of expected future costs assuming some efficiency gains over time. It is assumed that the Company will pay any required Pension Protection Fund Risk Based levies in addition.

The expense reserve at 1 January 2021 is intended to broadly cover the expected ongoing costs of the Plan over the next 10-15 years.

For the 2021 valuation, administrative and other non-investment expenses (including Pension Protection Fund Scheme Based levies) are broadly allowed for by an expense reserve equal to £90m, which reflects an assumption of some efficiency gains over time.

Actuarial investigation as at 1 January 2021

The Trustee (having taken the advice of the Actuary) and the Company have agreed on the assumptions for the investigation as at 1 January 2021, in line with the process described above. Details are set out in the table below:

	Approach	Single equivalent rate % pa
Discount rate for pensioner liabilities	BoE gilt nominal curve	0.58%*
Discount rate for non-pensioner liabilities	BoE gilt nominal curve plus 0.60% pa	1.18%*
Discount rate for future service	BoE gilt nominal curve plus 1.2% pa	1.78%*

*Shown for illustrative purposes only and is based on the Bank of England spot yield at the duration of the Plan liabilities (16 years).

The discount rate used for future service contributions is based upon a best estimate of the investment return for the Plan's assets. This is assumed to be 1.20% per annum above the Bank of England gilt nominal curve.

The discount rate assumptions take into account the Trustee's view of the covenant of the employers, including appropriate allowance for the guarantees provided by the Company's parent, Pearson plc.

The discount rate for non-pensioner liabilities is also used to discount the value of members' reference scheme test ("RST") underpin that exceeds their estimated money purchase fund value at their Normal Retirement Date.

Other financial assumptions as at 1 January 2021

The other financial assumptions that are not fixed have been set relative to the BoE gilt RPI curve.

Following the announcement of the convergence of RPI and CPIH from 2030 onwards CPI price inflation has been derived as RPI price inflation less a deduction of 1% per annum pre 2030, and equal to RPI post 2030.

The pension increases assumptions have been derived by applying the Black-Scholes model to the appropriate inflation assumption, with a volatility of 1.5% per annum for RPI linked increases and volatility of 1% per annum for CPI linked increases.

	Assumption	Approximate single equivalent rate % per annum
Price inflation (RPI):	BoE gilt RPI curve	3.38%*
Price inflation (CPI):		
> pre 2030	RPI less 1.0% pa	2.28%*
> post 2030	Equal to RPI	3.38%*
Salary increases (which includes an allowance for promotional increases):	RPI plus 0.5% pa	3.88%*
Pension increases:		
RPI, max 5%		3.27%*
RPI, max 5%, min 3%	Set using the assumed rate of inflation and a Black-Scholes model with inflation volatility of 1.5% per annum for RPI linked increases and 1.0% for CPI linked increases	3.71%*
RPI, max 3%		2.56%*
RPI, min 0%		3.38%*
RPI, min 4%		4.36%*
CPI, max 3%		2.63%*
Fixed 3%		3.00%

*Shown for illustrative purposes only based on the Bank of England RPI spot yield at the duration of the Plan liabilities (16 years).

Statistical assumptions as at 1 January 2021

Post-retirement mortality is based on the Plan's actual experience and other statistical analysis of the expected longevity of the membership. These are based on the Self-Administered Pension Schemes (SAPS) published tables, rolled forward as appropriate. Improvements as at the valuation date are assumed to be in line with the Continuous Mortality Investigation (CMI) 2019 projections, with a long-term rate of 1.5% per annum and a default smoothing factor of 7.0 for males and females and an initial addition of 0%. Sample rates for the agreed base tables are shown in Appendix B to this Statement. For future years the latest available CMI projection model will be adopted with a long-term rate of 1.5% per annum, with all other parameters set to the default.

Post-retirement mortality assumed for the calculation of future service contributions is the same as used to value the non-insured liabilities.

For the long term target basis the mortality assumptions are the same as the technical provisions but with an initial addition of 0.4%.

Details (including sample rates) of the remaining demographic assumptions for the investigation as at 1 January 2021 are also shown in Appendix B.

Reserves

A reserve of £20m has been included in the technical provisions in respect of death in service lump sum benefits and ill-health and dependents benefits for Money Purchase 2003 Section members. In addition to this, various reserves have been included which relate to the cost of reconciling and equalising the Plan's GMPs. The reserves included are as follows.

- £9.5m for GMP reconciliation
- 0.5% of the technical provisions liabilities and 0.75% of the long term target liabilities for the estimated cost of equalising the Plan's GMPs
- £2m for the cost of equalising historic transfer values

Valuation of defined benefit underpin for Money Purchase 2003 members

For the purpose of this calculation the value of the reference scheme test ("RST") benefit underpin was determined by comparing, for each member, the assets expected at retirement calculated assuming that members' investments achieve a return of 2.0% per annum above BoE gilt nominal curve, extended beyond 40 years, in the period before retirement. This is broadly intended to represent a prudent estimate of the investment strategy underlying the default "lifecycle" option with the cost of providing the RST underpin. It has been assumed that any underpin is provided through conversion within the Plan.

The terms for converting funds into a Plan pension are based upon discount rates in line with BoE gilt nominal curve with no margin applied.

Where the underpin bites, any additional funding needed is assumed to be invested with the rest of the assets before retirement, and is therefore discounted at the term dependent discount rate which is applied to the defined benefit assets using the assumptions underlying the technical provisions for non-insured liabilities. At 1 January 2021 this discount rate was the gilt curve plus a margin of 0.60% per annum. Post-retirement, the discount rate adopted is in line with gilt yields with no margin applied.

Whilst a member remains in active service, their money purchase funds are expected to increase in line with contributions paid and with investment returns. However, RST pension accrual ceased with effect from 5 April 2016. From that point onwards, an active member's RST pension remains fixed until they leave service. After leaving service, the RST pension increases in line with deferred revaluation. For the technical provisions at 1 January 2021 it has been assumed that active members remain in service for three years (subject to retirement before three years) following the valuation date.

The Trustee and the Company have agreed that Money Purchase 2003 Section members should be given the option to convert their fund values into a pension from the Plan at retirement regardless of whether the RST underpin bites. Therefore it is appropriate to make allowance for a proportion of Money Purchase 2003 Section members to be provided with pensions from the Plan even where the RST underpin is not expected to apply. For the technical provisions at 1 January 2021 it has been assumed that 50% on average of members for whom the RST underpin does not bite opt to convert their funds to pension within the Plan and the remaining 50% transfer out at retirement.

Eliminating a shortfall

The Trustee and the Company have agreed that any funding shortfalls identified at an actuarial valuation should be eliminated as quickly as the Participating Employers can reasonably afford by the payment of additional fixed annual contributions over the agreed recovery period. In determining the actual recovery period at any particular valuation the Trustee will take into account the following factors to the extent that these are relevant; amongst others:

- the size of the funding shortfall
- the risk that the value of the Plan's assets may deteriorate further relative to the technical provisions, the secondary funding objective and the solvency liabilities of the Plan
- independent advice received by the Trustee on the financial position of Pearson plc, the Company and/or the Participating Employers and their ability to pay the required contributions

- the impact, if any, of proposed deficit payments on the credit rating of Pearson plc.

The Plan is calculated to be £160m in surplus on the technical provisions basis at 1 January 2021 using the assumptions as set out in this Statement of Funding Principles, and therefore no shortfall contributions have been calculated.

Frequency of actuarial investigations

The Plan's sixth actuarial valuation under Part 3 of the Pensions Act 2004 has been carried out as at 1 January 2021. The Actuary will provide an estimate of the up-to-date financial position of the Plan, relative to the statutory funding objective and the solvency liabilities, as at each 1 January for which a full valuation is not requested. In the normal course of events, such annual updates would not be expected to lead to changes to the agreed Schedule of Contributions.

In general, the Trustee will request subsequent valuations three years after the preceding one and the intention is that the next valuation will be as at 1 January 2024. However, the Trustee may call for a formal funding valuation at any date if they are of the opinion that events have made it unsafe to rely on the results of the previous valuation for funding purposes. In reaching such a view, the Trustee will consider the advice of the Actuary and consult with the Company.

Arrangements for other parties to make payments to the Plan

Other than as reflected in the terms of the guarantee from Pearson plc, there are no arrangements for a person other than the Participating Employers or a member of the Plan to contribute to the funds held by the Plan.

Paying funding surpluses to the employer

The General Rules do not include provisions for the Trustee to make payments to the Company out of funds held for the purposes of the Plan unless a surplus exists following a winding-up of the Plan.

Cash equivalent transfer value calculations

The Trustee will ask the Actuary to advise them on a regular basis of the extent to which assets are sufficient to provide cash equivalent transfer values for all non-pensioners without adversely affecting the security of the benefits of other members and beneficiaries. The Trustee's policy is not to reduce cash equivalent transfer values paid to members unless the Actuary advises that the Plan's assets are materially insufficient to provide cash equivalent transfer values in full to all members, on the method and assumptions adopted for that purpose, in which case it will consider whether or not transfer values should be scaled back.

Dates of review of this Statement

This Statement will be reviewed, and if necessary revised, by the Trustee either

- within 15 months after the effective date of each actuarial valuation; or
- within a reasonable period after any occasion on which the Regulator has used its powers to modify future accrual of the Plan, directed as to the manner in which technical provisions are to be calculated or the period over which failure to meet the statutory funding objective is to be remedied, or imposed a Schedule of Contributions.

The Trustee may also elect to review, and if necessary revise, the Statement at other appropriate times.

Signed on behalf of the Company:

Name	Date
Signature	Position

Signed on behalf of the Trustee of the Plan:

Name	Date
Signature	Position

Appendix A

Technical Provisions Assumptions

Financial Assumptions

Item	Derivation
Discount interest rate:	
> non-pensioners	Gilt curve* plus 0.6% per annum
> pensioners	Gilt curve
Price inflation (RPI)	Inflation curve**
Price inflation (CPI)	Pre 2030: RPI less 1.0% per annum Post 2030: RPI less 0.0% per annum
Salary inflation	RPI plus 0.5% per annum
Deferred pension revaluation:	Set using the assumed rate of inflation with the relevant caps and floors
Pension increases post retirement:	Set using the assumed rate of inflation and a Black-Scholes model with inflation volatility of 1.5% per annum for RPI linked increases and 1.0% for CPI linked increases
Expected returns on Money Purchase funds (RST valuation):	Gilt curve* plus 2.0% per annum

* The gilt curve referenced above is the Bank of England gilt nominal curve, extended by assuming the curve is flat beyond 40 years.

** The inflation curve referenced above is the Bank of England gilt RPI curve, extended by assuming the curve is flat beyond 40 years.

Demographic Assumptions

Sample rates for some of the assumptions can be found in Appendix B.

Item	Assumption
Mortality pre and post retirement	95% of the S3PA table for males and 97% of the S3PA table for females projected from 2013 in line with the CMI 2019 projections and with long term improvement rates of 1.5% p.a. for both males and females, a default smoothing parameter of 7.0 and an initial addition of 0%. For future years the latest available CMI projection model will be adopted with a long-term rate of 1.5% per annum, with all other parameters set to the default.
New entrants	No allowance
Withdrawal from active service	Active members are assumed to withdraw from active service in line with the table set out in Appendix B
Transfer values	10% of members assumed to take a transfer value at retirement, with transfer values being set at 93% of the value of the technical provisions liability
Ill health retirements	Some ill health early retirement assumed for active members in line with the table set out in Appendix B
Early retirement	Active members: 10%(m) & 5%(f) of members retiring at age 55, 20% of members retiring at age 60, with the remainder retiring at their Normal Retirement Age Deferred members: Extel Section: Members assumed to retire at age 62 Other Sections: Members assumed to retire at NRA
Late retirement	No allowance
Age difference of dependants	Used dependants actual date of birth where available, where this is not available it has been assumed that male members are 4 years older than their female spouses and female members are 2 years younger than their male spouses.
Commutation	Members assumed to commute 18% of pension at retirement. The assumed commutation terms have been derived using investment returns of 1.5% above nominal gilt yields.
Proportion married	Used actual dependant existence data where available, where this is not available it has been assumed that 85% of males and 60% of females are married at retirement
Expenses: > Administration and other non-investment expenses (including PPF scheme-based levies)	Expense reserve of £90m within the technical provisions liabilities Expense reserve of £119m within the Long Term Target liabilities
> Insurance of death in service lump sums	Reserve of £20m
> Investment Expenses	No explicit allowance. Discount rates are net of investment expenses.
> GMP Reconciliation & Equalisation	£9.5m reserve for GMP reconciliation 0.5% of technical provisions liabilities 0.75% of Long Term Target liabilities £2m additional allowance for the cost of equalising historic transfer values

Appendix B

Sample Rates for Standard Tables used

Mortality in retirement

Age	Male life expectancy	Female life expectancy
60	87.3	89.6
65	87.5	89.7
70	88.0	89.9
75	88.9	90.5
80	90.1	91.3

Early retirement from active service

Age	Male early retirement assumption	Female early retirement assumption
55	0.10	0.05
60	0.20	0.20

Ill health retirement from active service

Age	Male ill health assumption	Female ill health assumption
35	0.00012	0.00012
40	0.00037	0.00037
45	0.00053	0.00053
50	0.00083	0.00083
55	0.00156	0.00156
60	0.00306	0.00306

Withdrawal from active service

Age	Male withdrawal assumption	Female withdrawal assumption
25	0.120	0.120
30	0.120	0.120
35	0.096	0.096
40	0.084	0.084
45	0.048	0.048
50	0.024	0.024

2021 Schedule of contributions

The Pearson Pension Plan

This schedule has been prepared by the Trustee of the Pearson Pension Plan ("the Plan") to satisfy the requirements of Section 227 of the Pensions Act 2004 after obtaining the advice of the Plan Actuary. The Trustee has discussed and agreed this schedule with the Principal Company, Pearson Services Limited ("the Company"). The Company has agreed this Schedule on behalf of itself and the other participating employers.

This schedule specifies the rates and due dates of employer and employee contributions to the Plan for the period from 1 January 2022 to 1 January 2027. It is subject to review, and if necessary revision, from time to time as required by legislation and following actuarial valuations.

The contributions for the period from 1 January 2021 to 31 December 2021 were payable in accordance with the Schedule of Contributions certified on 15 November 2018.

Members' contributions

The level of member contributions is dependent upon the Section of the Plan to which the member belongs, as follows:

Section	% of Pensionable Salary
Civil Service Classic	1.5
Civil service Premium	2.0
Final Pay	5.0
TQ Classic	1.5
TQ Classic Plus	3.5
Money Purchase 2003	Various, between 3.0% and 8.0%
Auto Enrolment	5.0% of Qualifying Earnings per annum

Due Dates

With the exception of the first month's contributions for members of the Auto Enrolment section, these contributions are payable to the Trustee within 19 days from the end of the month in which the deduction from members' earnings was made. The members' first deductions from the Auto Enrolment section are payable by the end of the second month after the month in which the auto enrolment date fell.

Members may pay additional voluntary contributions to the Plan.

Employer Contributions

Regular contributions

Company

The Company will pay contributions to the Plan in respect of future accrual for active members at the following rates:

Final salary sections	62.5% of Pensionable Salary per annum
Money Purchase 2003	The employer will pay twice the member's contribution rate as a percentage of Pensionable Salary.
Auto Enrolment	3.0% of Qualifying Earnings per annum. This rate will be increased if and when required to satisfy the minimum Auto Enrolment requirements.

Employer regular contributions are payable to the Trustee on the same Due Dates as the employee contributions.

Other employer contributions

In addition to the contributions shown above, the participating employers shall pay the following:

- A. Additional contributions as may be required under the Rules in specific circumstances, for example to cover augmentation, AVC matching for specified individuals or as a result of the bulk transfers.
- B. Additional contributions to meet the cost of any Risk Based Levy payable to the Pension Protection Fund, within 28 days of the Plan receiving a levy invoice requiring payment of such levy.
- C. Where alternative agreements are not reached with the Trustee, additional contributions in respect of any statutory debt arising from the withdrawal of a participating employer.
- D. Such other contributions as are, from time to time, agreed by the Trustee and participating employers.

Definitions of Pensionable Salary

The definition of Pensionable Salary is set out in the Rules for each section. The definition of Qualifying Earnings, on which the contributions for the Auto Enrolment section are based, is set out in the Rules for the Auto Enrolment section.

Agreed by Pearson Services Limited

Name

Date

Signature

Position

Agreed by Pearson Pension Trustee Limited

Name

Date

Signature of the Trustee

Position

Actuary's certification of schedule of contributions

The Pearson Pension Plan

Adequacy of rates of contributions

1. I certify that, in my opinion, the rates of contributions shown in this schedule of contributions are such that the statutory funding objective could have been expected on 1 January 2021 to be met for the period for which the schedule is to be in force.

Adherence to statement of funding principles

2. I hereby certify that, in my opinion, this schedule of contributions is consistent with the 2021 Statement of Funding Principles.

The certification of the adequacy of the rates of contributions for the purpose of securing that the statutory funding objective can be expected to be met is not a certification of their adequacy for the purpose of securing the Plan's liabilities by the purchase of annuities, if the Plan were to be wound up.

Signature

Date

Name

Steve Leake

Qualification

Fellow of the Institute and
Faculty of Actuaries

Address

Phoenix House
1 Station Hill
Reading
Berkshire
RG1 1NB

Employer

XPS Pensions Consulting Limited

Appendix F

Section 179 Certificate

Scheme/section details:

Full name of Scheme:	The Pearson Pension Plan
Name of section, if applicable:	N/A
Pension Scheme Registration Number:	10157215
Address of Scheme (or section, where appropriate):	The Pearson Pension Plan 80 Strand London WC2R 0RL United Kingdom
s179 valuation	
Effective date of this valuation	31/12/2020
Guidance and assumptions	
s179 guidance used for this valuation	G8
s179 assumptions used for this valuation	A9
Assets	
Total assets (this figure should <u>not</u> be reduced by the amount of any external liabilities and should include the insurance policies referred to below)	£ 3,913,000,000
Date of relevant accounts	31/12/2020
Percentage of the assets shown above held in the form of a contract of insurance where this is not included in the asset value recorded in the relevant Plan accounts.	-1.0%
Liabilities	
Please show liabilities for:	
Active members (excluding expenses)	£ 74,649,000
Deferred members (excluding expenses)	£ 1,406,946,000
Pensioner members (excluding expenses)	£ 1,462,331,000
Estimated expenses of winding up	£ 30,791,000
Estimated expenses of benefit installation/payment	£ 14,472,000
External liabilities	£ 0
Total protected liabilities	£ 2,989,189,000

Section 179 Certificate

continued

Please provide the percentage of the liabilities shown above that are fully matched by insured annuity contracts for:

Active members:	0 %
Deferred members:	0 %
Pensioner members:	84.5 %

Proportion of liabilities

Please show the proportion of liabilities which relate to each period of service for:

	Before 6 April 1997	6 April 1997 to 5 April 2009 (inclusive)	After 5 April 2009
Active members:	1%	38%	61%
Deferred members:	24%	57%	18%
	Before 6 April 1997	After 5 April 1997	
Pensioner members:	77%	23%	

Number of members and average ages

For each member type, please show the number of members and the average age (weighted by protected liabilities) as at the effective date of this valuation. Average ages should be rounded to the nearest whole year.

	Number	Average age
Active members*:	228	48
Deferred members*:	8,787	53
Pensioner members:	8,624	72

*Includes DB members and MP members where RST underpin is expected to bite.

Section 179 Certificate continued

I certify that this valuation has been carried out in accordance with the Pension Protection Fund (Valuation) Regulations 2005 and with the appropriate section 179 guidance and assumptions issued by the Board of the Pension Protection Fund.

Signature

Date

Name

Steve Leake

Qualification

Fellow of the Institute
and Faculty of Actuaries

Address

XPS Pensions
Phoenix House
1 Station Hill
Reading
Berkshire
RG1 1NB

Employer

XPS Pensions Consulting Limited



Contact us
xpsgroup.com

Registration

XPS Pensions Consulting Limited, Registered No. 2459442.

XPS Investment Limited, Registered No. 6242672.

XPS Pensions Limited, Registered No. 3842603.

XPS Administration Limited, Registered No. 9428346.

XPS Pensions (RL) Limited, Registered No. 5817049.

XPS Pensions (Trigon) Limited, Registered No. 12085392.

All registered at: Phoenix House, 1 Station Hill, Reading, RG1 1NB.

Authorisation

XPS Investment Limited is authorised and regulated by the Financial Conduct Authority for investment and general insurance business (FCA Register No. 528774).