Report on the actuarial valuation as at 31 March 2019

Clwyd Pension Fund

31 March 2020

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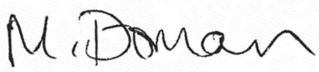
Introduction

This report is addressed to Flintshire County Council (“the Administering Authority”) as the Administering Authority of the Clwyd Pension Fund (“the Fund”) and is provided to meet the requirements of Regulation 62 of the Local Government Pension Scheme Regulations 2013 (as amended) (“the Regulations”). It describes the factors considered by the Administering Authority when carrying out the actuarial valuation as at 31 March 2019 and the decisions reached as a result.

The purpose of the actuarial valuation is for the Administering Authority to determine:

- The expected cost of providing the benefits built up by members at the valuation date (the “liabilities”), and compare this against the funds held by the Fund (the “assets”).
- The contributions needed to cover the cost of the benefits that active members will build up in the future and other costs incurred in running the Fund (the ‘Primary Contribution Rate’).
- An appropriate plan for making up the shortfall if the Fund has less assets than liabilities. This plan will cover the amounts which will need to be paid (the ‘Secondary Contribution Rate’) and the timeframe over which they will be paid (‘the Recovery Period’).

Signature		
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Date	31 March 2020	

This report uses various technical terms. These are explained in more detail in the explanatory boxes which appear throughout this report, and in the Glossary at Appendix I.

This report has been prepared in accordance with Technical Actuarial Standards TAS 100: Principles for Technical Actuarial Work and TAS 300: Pensions which are issued by the Financial Reporting Council. The calculations referred to in the report use methods and assumptions appropriate for reviewing the financial position of the Fund and determining a contribution rate for the future. Mercer does not accept liability to any third party in respect of this report; nor do we accept liability to the Administering Authority if the information provided in this report is used for any purpose other than that stated. The report may be disclosed to members and others who have a statutory right to see it. It may also be disclosed to any participating employer and, if the Administering Authority and Mercer consent, it may be disclosed to other third parties.

1 Funding Strategy – Key Elements

Fundamental to the valuation results is the funding strategy adopted by the Fund. This funding strategy is set out in a specific document (the Funding Strategy Statement or FSS for short) which is one of the Administering Authority's key governance documents for the Fund. In essence, the FSS sets out an overview of the approach to be used for the actuarial valuation. Amongst other things it outlines the assumptions, both economic and demographic, to be used in calculating the value of the liabilities built up, the contributions required to correct any funding shortfall or surplus, and the contribution rate required to fund the benefits for future service. It also sets out the strategy for making good any funding shortfall, in particular how any shortfall is expected to be financed in terms of the balance between future contributions and future investment returns, and the period over which any surplus or shortfall is expected to be recovered.

> The FSS is the Administering Authority's key governance document in relation to the actuarial valuation. It sets out the funding policies adopted, the actuarial assumptions used, and the timescales over which deficits will be paid off. Employers are consulted about the FSS as part of the actuarial valuation process.

The principal elements of the funding strategy adopted for this actuarial valuation are as follows:

- The McCloud judgment (see Appendix D for details) – the valuation results as set out in Section 2 of this report do not include an allowance in relation to the potential cost of the McCloud judgment. However, an estimate of the effect of the judgment for the whole Fund is shown at the end of that section. Each employer has been notified of a reasonable estimate of the potential cost of the judgment and given the option to pay additional contributions over 2020/23 in respect of this which would not be reviewed until the next actuarial valuation unless this is a requirement of the final remedy process. Once the final remedy for McCloud is known, employers who did not make an allowance in their rates will be notified of the costs and any additional payments required.

> The "McCloud judgment" refers to a legal challenge in relation to historic benefit changes for all public sector schemes being age discriminatory. The Government announced in 2019 that this needs to be remedied for all schemes including the LGPS. This is likely to result in increased costs for some employers. This remedy is not yet agreed but guidance issued requires that each Fund sets out its policy on addressing the implications.

- Assumed rate of future long term average CPI inflation = 2.4% p.a., based on the yields available on gilts and index-linked gilts of appropriate duration less an adjustment of 1% p.a. to allow for the difference between market-implied future RPI and estimated future CPI inflation.
- Real investment returns over and above CPI for past service = 1.75% p.a., based on the anticipated real returns achievable on the Fund's expected long-term investment strategy with a suitable margin for prudence.
- Real investment returns over and above CPI for future service = 2.25% p.a., based on the anticipated real returns achievable on future invested contributions.

- Future pay growth = 2% p.a. over the 4 years to April 2023 for the majority of the employers, taking into account the government's policy on pay restraint in the public sector, and then 1.25% p.a. over and above CPI in the longer term. A small number of employers did not opt to include the short term assumption and hence assumed that pay growth was 1.25% p.a. over and above CPI throughout.
- Baseline life expectancy based on a scheme-specific mortality study.
- Future mortality improvements based on the CMI 2018 model with a long-term improvement trend of 1.75% p.a.
- An average recovery period of 13 years for correcting any imbalance between the existing assets and past service liabilities. The FSS sets out the circumstances in which this might vary from one employer to another.

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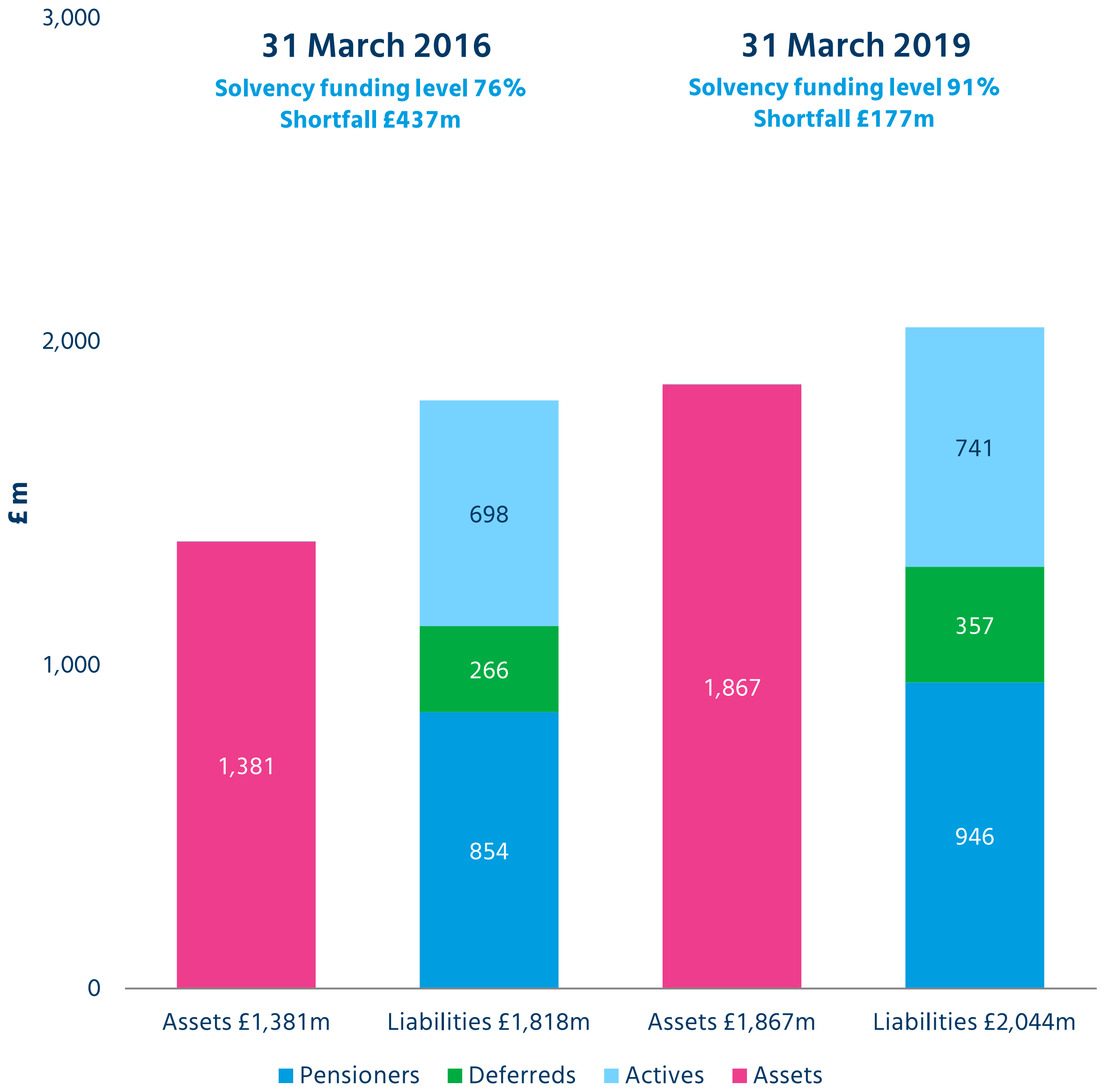
Key results of the funding assessment

Solvency funding position

The table below compares the assets and liabilities of the Fund at 31 March 2019. Figures are also shown for the last valuation as at 31 March 2016 for comparison.



The chart shows that **at 31 March 2019 there was a shortfall of £177m** against the Fund's solvency funding target. An alternative way of expressing the position is that **the Fund's assets were sufficient to cover 91% of its liabilities** – this percentage is known as the solvency funding level of the Fund.

At the previous valuation at 31 March 2016 the shortfall was £437m, equivalent to a solvency funding level of 76%. The key reasons for the changes between the two valuations are considered in Section 4.

The liability value at 31 March 2019 shown in the table above is known as the Fund's "solvency funding target". The solvency funding target is calculated using assumptions that the Administering Authority has determined are appropriate having consulted with the actuary, and are also set out in the FSS.

> The LGPS Regulations require the contributions to be set so as to secure the Fund's solvency and long-term cost efficiency. In this context solvency means being able to meet the liabilities as and when they arise, with long-term cost efficiency meaning that contribution levels should not be set so as to give rise to additional costs at a later date. In practice, contribution levels have been set so as to target a solvency funding level of 100%, based on the funding parameters outlined in Section 2 above.

Further details of the way in which the solvency funding target has been calculated are set out in Appendix A.

Primary Contribution Rate

The valuation looks at the normal employer contribution rate required to cover the cost of the benefits (including death benefits and expenses) that will be built up over the year after the valuation date (the "Primary Contribution Rate"). A summary of the assumptions used is provided in Appendix A.

> The "Primary rate" of the employer's contribution is the contribution rate required to meet the cost of the future accrual of benefits including ancillary, death in service and ill health benefits together with administration costs.

The table below gives a breakdown of the Primary Contribution Rate at 31 March 2019 and also shows the corresponding rate at 31 March 2016 for comparison. In calculating the average Primary Contribution Rate we have not made any allowance for future members to opt for the 50:50 scheme.

Active members pay contributions to the Fund as a condition of membership in line with the rates required under the governing Regulations (see Appendix D).

	% of Pensionable Pay	
PRIMARY CONTRIBUTION RATE	**31 March 2019**	**31 March 2016**
Normal Contribution rate for retirement and death benefits	22.7	20.9
Allowance for administrative expenses	0.8	0.6
Total normal contribution rate	23.5	21.5
Average member contribution rate	6.2	6.2
Primary contribution rate*	17.3	15.3

** In line with updated CIPFA guidance, the 2019 Primary Contribution Rate is the weighted average of the individual employer Primary Contribution Rates as derived based on their individual circumstances (e.g. whether or not they are closed to new entrants).*

Correcting the imbalance – Secondary Contribution Rate

The funding objective as set out in the FSS is to achieve and maintain a solvency funding level of 100% of liabilities (the solvency funding target). In line with the FSS, where a shortfall exists at the effective date of the valuation a deficit recovery plan will be put in place which requires additional contributions to correct the shortfall. Equally, where there is a surplus it is usually appropriate to offset this against contributions for future service, in which case contribution reductions will be put in place to allow for this.

The FSS sets out the process for determining the recovery plan in respect of each employer. At this actuarial valuation the average recovery period adopted is 13 years, and the total initial recovery payment (the "Secondary rate" for 2020/21) is an addition of approximately £16m per annum in £ terms (which allows for the contribution plans which have been set for individual employers under the provisions of the FSS), including the estimated costs in relation to the McCloud judgment where appropriate and allowance for some employers to make a prepayment of their deficit contributions.

> The "Secondary rate" of an individual employers' contribution is an adjustment to the Primary Contribution Rate to reflect any past service deficit or surplus, to arrive at the rate the employers are required to pay.

The McCloud Judgment

As described in Section 1 of this report, the above figures do not include an allowance for the estimated cost of the McCloud judgment. However, at the overall Fund level we estimate that the cost of the judgment could be an increase in past service liabilities of broadly £9 million and an increase in the Primary Contribution Rate of 0.5% of Pensionable Pay per annum.

> The "McCloud judgment" refers to a legal challenge in relation to historic benefit changes for all public sector schemes being age discriminatory. The Government announced in 2019 that this needs to be remedied for all schemes including the LGPS. This is likely to result in increased costs for some employers. This remedy is not yet agreed but guidance issued requires that each Fund sets out its policy on addressing the implications.

3 Experience since last valuation

Summary of key inter-valuation experience

The outcomes from the valuation are determined both by the assumptions adopted for the future, and the Fund's historic experience relative to assumptions made in the past. In this section we consider the effect of the Fund's experience over the last three years.

The last actuarial valuation was carried out with an effective date of 31 March 2016. With effect from 1 April 2014 the scheme's benefit structure changed from a Final Salary Scheme to a Career Average Revalued Earnings (CARE) Scheme, and the 2016 actuarial valuation took these changes into account.

The average Pensionable Salary increase for the Fund members who were in service for the whole of the inter-valuation period was 3.0% per annum.

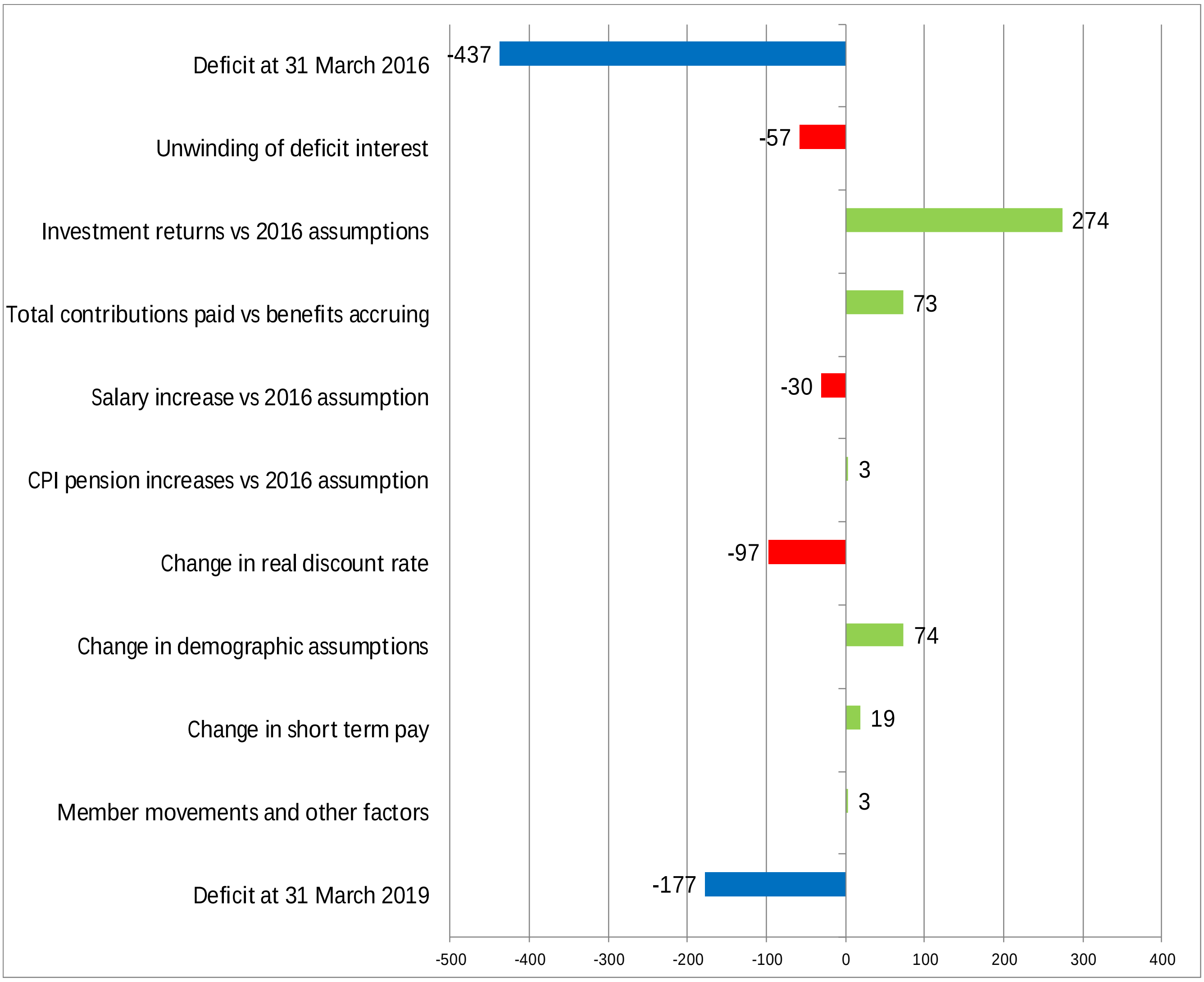
Pensions in payment (in excess of Guaranteed Minimum Pensions (GMPs) were increased as guaranteed under the Fund as follows:

- April 2017 1.0%
- April 2018 3.0%
- April 2019 2.4%

Over the inter-valuation period, benefit inflation has averaged 2.1% p.a. Over the three years to 31 March 2019 the net investment return on the Fund's assets has averaged 9.9% per annum, meaning that the average real return over CPI inflation has been about 7.6% p.a.

Reasons for the change in funding position since the last actuarial valuation

The shortfall at the last valuation date was £437m. The chart below sets out the main reasons for the change in the shortfall between 31 March 2016 and 31 March 2019 (figures shown in £m).



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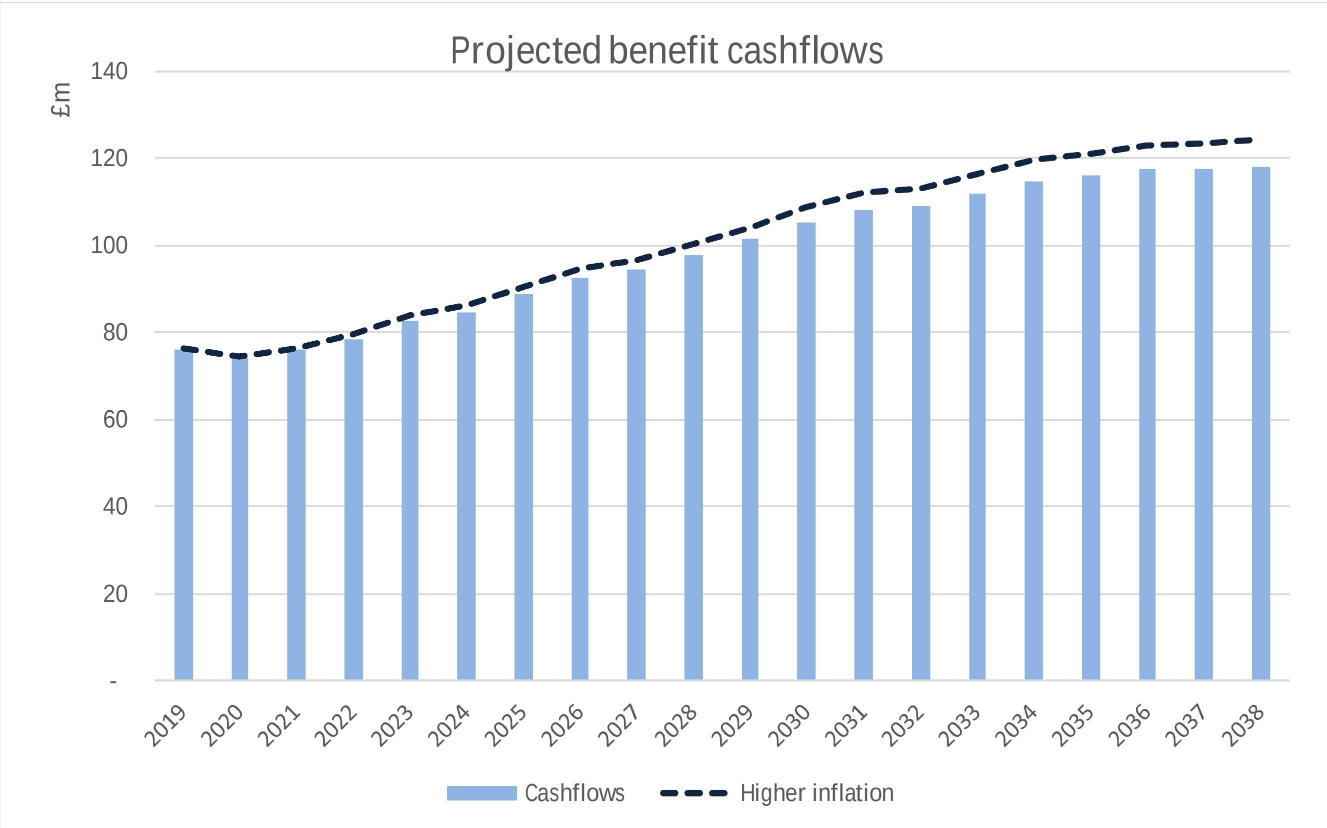
Cash flows, risks and alternative funding positions

Benefit cash flows

The projected benefit cash flows which result from applying the assumptions as set out in Section 2 are shown in the chart below. The additional trendline sets out how those total projected benefit cash flows would change if we were to assume inflation of 0.25% p.a. higher than the assumption of 2.4% p.a. used for the actuarial valuation. Over the 20 years following the valuation date, the extra benefit payments which would result from the extra 0.25% p.a. inflation assumption are projected to be £59m.

> The actuarial valuation process is principally concerned with projecting all the expected benefit cash flows into the future, and then converting them into present day values by discounting them to allow for assumed future investment returns. The chart shows those projected cash flows, and also illustrates how sensitive they are to the future inflation assumption.



Projected funding position at next actuarial valuation

As part of this valuation, the Administering Authority has set an average recovery plan of approximately 13 years. The next actuarial valuation will take place with an effective date of 31 March 2022. If experience up to that date were to be in line with the assumptions made for this current actuarial valuation and contributions are paid at the agreed rates or amounts, there would be a shortfall at 31 March 2022 of £155m, equivalent to a funding level of 93%.

Material risks faced by the Fund

The Fund is subject to some potentially material risks that are, to an extent, outside the Administering Authority's control, but could affect the funding level and ultimately the employer contribution requirements. Any material worsening of the funding level will mean more contributions are needed (either at an increased rate or at the same rate over a longer period) to be able to provide the benefits built up in the Fund – unless experience acts in other ways to improve the funding level. Examples of such risks, and how the Administering Authority manages them, are:

> Funding a defined benefit pension scheme such as the LGPS which is open to new members is by its nature uncertain, and involves some level of risk. The principal funding risks are investment (e.g. whether the Fund earns the desired level of long-term real returns) and demographic (e.g. whether longevity of members is longer or shorter than anticipated). In practice, the key is whether such risks can be managed and mitigated.

- If an Employer becomes unable to pay contributions or to make good deficits in the future, the Fund's assets will be lower than expected and the funding level will be worse than expected. The Administering Authority regularly monitors the financial strength of the Employers so that actions can be taken to mitigate (but not fully remove) the risk.

- If future investment returns on assets are lower than assumed in the valuation, the Fund's assets will be lower, and the funding level worse, than expected. The Administering Authority has a process in place to monitor investment performance quarterly, and it reviews the Fund's investment strategy alongside each actuarial valuation.

- The Fund has also put in place a Flightpath strategy, which provides a level of protection against the assets and liability risks for the Fund. This includes dynamic equity protection, which offers some protection to the Fund's asset values in the event of an equity market fall, and liability driven investment, which seeks to provide more stable long term real returns to provide more stability to contributions in the long term. Further details are set out in the FSS and the Investment Strategy Statement.

- If improvements in life expectancy are greater than assumed, the cost of benefits will increase because members are living longer than expected. This will mean the funding level will be worse than expected. The Administering Authority regularly reviews the Fund's experience and ensures that the assumptions it makes about members' life expectancy take the most recent information available into account.

- If members make decisions about their options which increase the Fund's liabilities, the funding level will be worse than expected. An example would be if members commute less pension for cash than is being assumed. The Administering Authority reviews the Fund's experience at each valuation to ensure that their treatment of member options remains appropriate.

Impact of COVID-19

The valuation results and employer contributions shown in this report are assessed as at 31 March 2019. In March 2020 we have seen significant falls in equity markets around the world in relation to the COVID-19 pandemic. This potentially has far-reaching consequences in terms of funding and risk which will need to be kept under review. Our view is that it is important to take stock of the situation as opposed to make immediate decisions in what is an unprecedented set of events. The Fund has a risk management framework in place and in particular, equity protection is in place, which will may help mitigate some of the impact of these equity market falls if they persist. The level of mitigation will depend on the structure of the arrangements which are constantly under review. Our view is that employer contributions should not be revisited but the position should be kept under review by the Administering Authority who will monitor the development of the situation and keep all stakeholders informed of any potential implications so that the outcome can be managed effectively. For some employers this could mean a review of contributions prior to the next valuation depending on their financial covenant.

Sensitivity of funding position to changes in key assumptions

The value placed on the Fund's liabilities is critically dependent on the assumptions used to carry out the calculations. If future experience differs from the assumptions the Administering Authority has used after consulting with the Employers, then the projected future funding level will be different from the level described above.

To illustrate how sensitive the funding level is to experience being different from assumed, the table below shows how the valuation results at 31 March 2019 would have differed given small changes in the key assumptions.

Assumption change	Increase in deficit at 31 March 2019 (£m)	Resultant surplus (deficit) at 31 March 2019 (£m)
Original solvency funding position	-	(177)
Real investment return 0.25% lower than assumed	89	(266)
Pensionable Salary growth 0.25% higher than assumed	8	(185)
Long term improvement rate in life expectancy increased by 0.25% per annum	14	(191)
Assets fall by 25%	467	(644)

Minimum risk funding position

In assessing the value of the Fund's liabilities (the solvency funding target), allowance has been made for investment returns as described in Appendix A, taking into account the investment strategy adopted by the Fund, as set out in the Fund's Investment Strategy Statement (ISS).

It is not possible to construct a portfolio of investments which produces a stream of income exactly matching the expected liability outgo. However, it is possible to construct a portfolio which attempts closely to match the liabilities and provide a high level of certainty in future investment returns above CPI inflation. This represents a “minimum risk” investment position. Such a portfolio would consist mainly of a mixture of long-term index-linked and fixed interest gilts. Investment of the Fund’s assets in line with the minimum risk portfolio would minimise fluctuations in the Fund’s minimum risk funding level between successive actuarial valuations but would result in much higher employer contributions (all other things equal).

If, at the valuation date, the Fund had been invested in this portfolio, then in carrying out the valuation it would not be appropriate to make any allowance for out-performance of the Fund investments. In this event the value of the Fund liabilities would have increased substantially, to £3,470m, and the funding level would have reduced correspondingly to 54%. If the actuarial assumptions are borne out in practice and contributions are paid in line with the Rates and Adjustment Certificate for all employers, the projected funding level on this basis at the next actuarial valuation would be slightly higher at 56%.

The value of the liabilities on the ongoing solvency funding target assumptions was £2,043m, which is £1,427m less than the value on the minimum risk basis. The funding plan is therefore making a prudent allowance for future investment returns of £1,427m over and above those available from the notional minimum risk investment portfolio to support the funding of member benefits along with contributions payable. This is an indication of the expected return built into the funding strategy for the Fund as a whole.

APPENDICES

Appendix A
Assumptions

How the benefits are valued

In order to calculate the liabilities, there is a need to make assumptions about various factors that affect the cost of the benefits provided by the Fund – for example, how long members will live, or the future level of inflation. The table below explains the key assumptions being made in the valuation.

Assumption	Why it is important and how it impacts on the liabilities
Discount rate	The majority of benefits in a pension fund are paid many years in the future. In the period before the benefits are paid, the Administering Authority invests the funds held by the Fund with the aim of achieving a return on those funds. When calculating how much money is needed now to make these benefit payments, it is appropriate to make allowance for the investment return that is expected to be earned on these funds. This is known as "discounting". The higher the investment return achieved, the less money needs to be set aside now to pay for benefits. The calculation reflects this by placing a lower value on the liabilities if the "discount rate" is higher.
Inflation	Pensions in payment increase in line with Consumer Price Inflation (CPI). Salary growth is also normally linked to price inflation in the long term. A higher inflation assumption will, all other things being equal, lead to a higher value being placed on the liabilities.
Pensionable Salary growth	Benefits earned prior to 1 April 2014 for active members are based on their salaries immediately before retirement, so it is necessary to make an assumption about future Pensionable Salary growth. The higher this assumption, the higher the value placed on the liabilities for active members.
Life expectancy	Pensions are paid while the member (and potentially their spouse or partner) is alive. The longer people live, the greater is the cost of providing a pension. Allowing for longer life expectancy therefore increases the liabilities.

The liabilities of the Fund are calculated by projecting forward all of the future benefit cash flows and discounting them back to the effective date of the valuation, using these assumptions. For example, the liability for a single pensioner is calculated by estimating the amount of each pension payment they will receive in the future, multiplying by the probability that the member will still be alive by the date of each payment, and then discounting each payment back to the effective date of the valuation using the appropriate discount rate, and then summing up all of these discounted amounts. The liabilities for the whole Fund are calculated by summing the liabilities for each of the individual members.

Financial assumptions used to calculate the solvency funding target

The table below summarises the key financial assumptions used in the calculation of the solvency funding target at whole Fund level and those used for the 31 March 2016 actuarial valuation. Section 1 of this report sets out how these assumptions might vary from one employer to another.

Financial assumptions	31 March 2019	31 March 2016
Discount rate	4.15% p.a.	4.2 % p.a.
Price inflation (CPI)	2.4% p.a.	2.2% p.a.
Salary increases (short term)	2% p.a. for 4 years	1% p.a. for 4 years
Salary increases (long term)	3.65% p.a.	3.45% p.a.
Pension increases in payment:	2.4% p.a.	2.2% p.a.

> Our analysis of expected future real investment returns uses a Monte Carlo simulation (stochastic) model, based on 4,000 simulations. Within the overall analysis we specify and calibrate a range of economic and asset class models. Our analysis uses an asset correlation matrix to help generate each stochastic simulation. The model includes estimates for long-term expected returns and inflation along with volatilities each asset class and inflation.

The key financial assumption is the expected long term investment return above CPI inflation as this is usually the principal factor which determines the long term cost to employers via their contributions. In determining this we consider first the long term real returns (i.e. returns above CPI) which the Fund's investment strategy can be expected to deliver based on market outlook at the valuation date taking into account the projected cashflow position of the Fund. This analysis then helps us recommend and agree with the Administering Authority on a suitably prudent assumption for the valuation discount rate based on the investment strategy, any risk management framework in place, and reasonably allowing for the likely changes in investment strategy as the Fund matures. In order to consider the level of prudence we look at the likelihood of the expected real return from the Fund's assets exceeding the assumption made. We measure this by considering the percentile expected return from the analysis. A return assumption higher than the 50th percentile return from the analysis can be deemed to be prudent and retain margins to provide some protection against increases in contributions at future valuations.

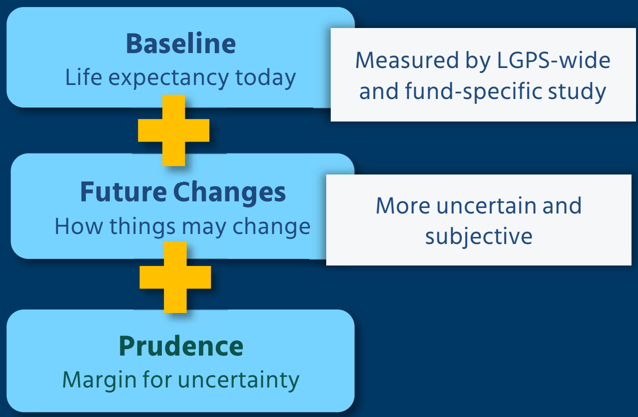
At this actuarial valuation the real discount rate which we have used is 1.75% p.a., which is the 65th percentile return from our analysis. At the previous valuation the real discount rate used was 2.0% p.a., which at the time was a similar percentile return.

Demographic assumptions used

Post-retirement Mortality

There are two separate decisions on mortality assumptions:

– The baseline table for the current rates of mortality; and
– The allowance for future improvements.



Mortality (or life expectancy) tables are typically made up of three elements: a baseline table (equivalent to the expected current mortality), an allowance for future improvements, and a margin for prudence. Very few pension funds are large enough for them to be able to determine a bespoke set of baseline assumptions based purely on the fund's own membership experience. Typically, the life expectancy assumptions are set by benchmarking a fund's membership profile and mortality experience against larger external datasets. For this actuarial valuation, we have benchmarked the Fund's membership profile and experience against the "S tables" published by the CMI. We have applied weightings and age ratings as appropriate to adjust the standard tables so as to arrive at assumptions which are appropriate for the Fund. We have generally used the S3PA tables ("middle" tables for females), other than for female dependants where the S3DA tables have been used and for members retiring in ill-health, where the S3IA tables have been used. At the 2016 actuarial valuation the S2PA tables were used (S2DA tables for female dependants).

The weightings and age ratings applied to the above are set out in the table below.

Current Status	Retirement Type	2019 weighting/age rating	2016 weighting/age rating
Annuitant	Normal Health	100% males, 92% females	99% males, 90% females
	Dependant	132% males, 92% females	130% males, 103% females
	Ill Health	122% males, 132% females	99% males, 90% females with an age rating of +3 years in each case
	Future Dependant	128% males, 111% females	118% males, 107% females
Active	Normal Health	106% males, 93% females	99% % males, 86% females
	Ill Health	122% males, 142% females	99% males, 86% females with an age rating of +4 years in each case
Deferred	All	128% males, 110% females	124% males, 99% females
Active/ deferred	Future Dependant	135% males, 118% females	106% males, 98% females

A weighting applied to an actuarial table has the effect of increasing or reducing the chance of survival at each age, which increases or reduces the corresponding life expectancy. Similarly, an age rating applied to an actuarial table has the effect of assuming that beneficiaries have a life expectancy equal to those older (or younger) than their actual age.

Future improvements are assumed to follow the CMI 2018 model with a 1.75% p.a. long-term improvements trend. At the 2016 actuarial valuation the CMI 2015 model with 1.75% p.a. long-term trend was used for males and 1.5% p.a. for females.

The mortality assumptions used for the 31 March 2019 valuation result in the following life expectancies.

	Years
Life expectancy for a male aged 65 now	22.4
Life expectancy at 65 for a male aged 45 now	24.0
Life expectancy for a female aged 65 now	24.8
Life expectancy at 65 for a female aged 45 now	26.8

Pre-retirement Mortality

The following mortality tables (together with any appropriate weightings and age ratings) have been adopted for mortality rates in the period up to retirement.

	31 March 2019	31 March 2016
Base Table	DxL08 tables with adjustments of 80% (male) 50% (female) to reflect the Fund's membership profile	DxL08 tables with adjustments of 80% (male) 50% (female) to reflect the Fund's membership profile
Allowance for Future Improvements	CMI_2015 [1.5%]	CMI_2015 [1.5%]

Commutation

It has been assumed that, on average, 50% of retiring members will take the maximum tax-free cash available at retirement and 50% will take a 3/80ths cash sum (the standard for pre April 2008 service). Members have the option to commute part of their pension at retirement in return for a lump sum at a rate of £12 cash for each £1 per annum of pension given up.

Retirement lump sums are less costly for the Fund to provide than the alternative pension, as members receive only £12 of each £1 p.a. of pension given up. If members take the cash sum option at a higher rate than has been assumed then this will normally lead to an improvement in the funding level.

Early retirement

For those members who are entitled to receive their accrued benefits (or part of those benefits) prior to the Fund's normal pension age, a proportion of the active membership is assumed to retire in normal health prior to age 65, as set out below:

If members take early retirement to a greater extent than has been assumed then this will typically lead to a worsening of the funding level. This is because many members are able to take substantial parts of their benefits from age 60 without them being reduced for early payment.

	% retiring per annum	% retiring per annum
Age	Males	Females
60	10	20
61	8	15
62	8	15
63	8	15
64	8	15
65	100	100

The appropriate early retirement factors applied to the relevant tranche of benefits are in line with the Government Actuary's Department (GAD) guidance.

Ill health retirement

A small proportion of the active membership has been assumed to retire owing to ill health. As an example of the rates assumed, the following is an extract from the decrement table used:

The level of ill-health retirement benefit provided for a member falls into one of three "tiers", depending on whether and when the member might be expected to resume gainful employment. Tier 1, for example, is on the basis that the member is unlikely to be able to do so before Normal Pension Age. Full details are set out in the LGPS Regulations and associated guidance.

	% retiring per annum	% retiring per annum
Age	Males	Females
35	0.02	0.02
45	0.07	0.05
55	0.29	0.22

The proportion of ill health early retirements falling into each tier category, split by males and females, has been assumed to be as set out below:

	Tier 1	Tier 2	Tier 3
Males	75%	12.5%	12.5%
Females	75%	12.5%	12.5%

Withdrawal

This assumption relates to those members who leave the scheme with an entitlement to a deferred pension or transfer value. It has been assumed that active members will leave the Scheme at the following sample rates:

	% leaving per annum	% leaving per annum
Age	Males	Females
25	20.25	22.38
35	5.09	6.27
45	2.54	3.89

In relation to pre 2014 benefits, deferred benefits tend to be less costly for the Fund to provide than if the member had remained in the Fund until retirement. If the number of members leaving the Fund is greater than expected then this will typically lead to a slight improvement in the funding level.

Partners' and Dependants' Proportions

It has been assumed that the proportions of members below will on death give rise to a dependant's pension (spouse's and partner's), and that spouses/partners of female (male) members are three years older (younger), on average than the member.

	% spouse/partner	% spouse/partner
Age	Males	Females
25	43	46
35	69	60
45	72	60
55	74	60
65	76	55

If more members than assumed have partners then this will lead to an increase in the number of dependants pensions coming into payment over and above that expected. This would lead to a worsening of the funding level.

Assumptions used to calculate the Primary Contribution Rate

The cost of future accrual (the Primary Contribution Rate) has been calculated using the same actuarial assumptions as used to calculate the solvency funding target and recovery plan as set out above except that the financial assumptions adopted are as described below.

The financial assumptions for assessing the future service contribution rate should take account of the fact that contributions will be invested in market conditions applying at future dates, which are unknown at the effective date of the valuation, and which are not directly linked to market conditions at the valuation date.

The financial assumptions in relation to future service (i.e. the Primary Contribution Rate) are not specifically linked to investment conditions as at the valuation date itself, and are based on an overall assumed real return (i.e. return in excess of price inflation) of 2.25% per annum. This represents a reduction of 0.5% per annum compared to the 2016 valuation, which increases the estimated cost of providing LGPS benefits. With a long term average assumption for price inflation of 2.4% per annum, this gives rise to an overall discount rate of 4.65% p.a. (the corresponding discount rate at the 2016 actuarial valuation was 4.95% p.a.).

Nevertheless, it is instructive to consider the assumption against the long term real returns (i.e. returns above CPI) which the Fund's investment strategy can be expected to deliver based on the current market outlook. At this actuarial valuation the real discount rate used was 2.25% p.a., which is the 56th percentile return from our analysis. At the previous valuation the real discount rate used was 2.75% p.a., which at the time was a similar percentile return.

Appendix B
Summary membership data

The membership data is summarised in the table, with figures at the previous valuation shown for comparison.

Data in relation to members of the Fund were supplied by the Fund's administrator on behalf of the Administering Authority. The accuracy of the data provided has been relied on. While reasonableness checks on the data have been carried out, they do not guarantee the completeness or the accuracy of the data. Consequently, Mercer does not accept any liability in respect of its advice where it has relied on data that is incomplete or inaccurate.

	31 March 2019	31 March 2016
Active members		
Number	16,911	16,199
Total Pensionable Salaries (£000s p.a.)	253,011	224,423
Average Pensionable Salary (£ p.a.)	14,961	13,854
Average age (pension weighted)	50.6	49.7
Deferred pensioners		
Number	18,342	14,030
Total deferred pensions revalued to valuation date (£000s p.a.)	22,274	14,940
Average deferred pension (£ p.a.)	1,214	1,065
Average age (pension weighted)	48.4	48.3
Pensioners (including dependants)		
Number	13,201	11,464
Total pensions payable (£000s p.a.)	61,472	53,762
Average pension (£ p.a.)	4,657	4,690
Average age (pension weighted)	71.2	70.3

Appendix C
Assets

The market value of the Fund's assets was £1,866,775,000 on the valuation date.

The Administering Authority's investment strategy is to proportion the Fund's assets by asset class as shown in the table below. The actual distribution of assets will vary over time due to changes in financial markets. The table also shows the distribution of assets at the valuation date.

	Investment strategy	Actual market value of assets at 31 March 2019	
	%	£000s	%
Equities	14%	268,551	14.4%
Risk Management Framework	19%	422,855	22.7%
Private equity / Opportunistic	10%	211,584	11.3%
Hedge funds	9%	138,985	7.4%
Infrastructure / Timber & Agriculture	8%	89,878	4.8%
Property	4%	122,836	6.6%
Multi Strategy Investments	21%	365,757	19.6%
Private Debt	3%	32,744	1.8%
Multi Asset Credit	12%	203,790	10.9%
Cash	0%	5,765	0.3%
Current assets/liabilities	0%	4,032	0.2%
Total	100%	£1,866,775	100%

The Administering Authority also holds additional voluntary contributions (AVCs) which are separately invested. These assets have been excluded from the market value shown as they exactly match the value of the benefits they cover.

The details of the assets at the valuation date and the financial transactions during the inter-valuation period have been obtained from the audited accounts for the Fund.

Appendix D
Scheme benefits

The benefits valued within our calculations are those in force at the effective date of the valuation. Full details of these can be found in the Local Government Pension Scheme Regulations 2013 (as amended). The principal details are as follows:

The Local Government Pension Scheme Regulations 2013 (http://www.legislation.gov.uk/uksi/2013/2356/contents/made)

The Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014 (http://www.legislation.gov.uk/uksi/2014/525/contents/made)

Directions made by the Treasury under Section 59A of the Social Security Pensions Act 1975 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/761639/Treasury_Direction_under_section_59A_Social_Security_Pensions_Act_1975.pdf). We have made no allowance for the possibility that the directions may be extended to require the LGPS to become responsible for increases to GMPs for members reaching State Pension Age after 5 April 2021.

The Fund is also responsible for paying and, where appropriate, recharging to employers the benefits arising from the award of compensatory added years (CAY) of service on premature retirement. Unless these CAY benefits have been converted into "funded" benefits, they are normally recharged to the relevant employer (together with associated pension increases), and so are excluded from the valuation.

The benefits that will emerge from money purchase AVCs paid by members, and SCAVCs paid by employers, and the corresponding invested assets in respect of these AVCs and SCAVCs, have been excluded from the valuation.

UK and European law requires pension schemes to provide equal benefits to men and women in respect of service after 17 May 1990 (the date of the "Barber" judgment) and this includes providing equal benefits accrued from that date to reflect the differences in GMPs. Following the Lloyds Bank case in 2018, HM Treasury has issued a consultation on equalising and indexation of GMPs in all the public service pension schemes, including the LGPS, and discussions are ongoing about the extent of any inequalities and how these might be addressed.

The valuation makes no allowance for removal of these inequalities. It is consequently possible that additional funding will be required for equalisation once the law has been clarified. It is recommended that the Administering Authority seek further legal advice if it is concerned about this issue.

The McCloud Judgment

The McCloud judgment in the LGPS refers to the legal decisions (initially by the Employment Appeal Tribunal and then ratified by the Court of Appeal) in the Sargeant/McCloud cases for the Fire and Judiciary pension arrangements. The Court ruled that transitional protections afforded to older members when these schemes were amended constituted unlawful age discrimination. Remedial action, in the form of benefit changes for these schemes, will therefore be required.

Although the above cases did not relate directly to the LGPS, the LGPS also put in place protections for older members as part of the reforms which came into effect from 2014. For the LGPS these took the form of an underpin, where older members would get the better of the benefits payable under the new and old schemes. The UK Government confirmed on 15 July 2019 that, alongside the process to remedy the Fire and Judiciary schemes, it will also bring forward proposals to address the issue for the other public service pension schemes, including the LGPS, although it is unclear at this stage what the exact extent will be of any required changes.

Following discussions with the Administering Authority, in order to consider a reasonable provision for the potential costs in employer contributions we have assumed that the eventual remedy will be that the underpin which applies to older members will also apply to younger members who joined the Fund before 1 April 2012 (the cut-off date for the protections to apply) in the same way as for older members. More specifically we have agreed with the Administering Authority to:

- Estimate the underpin benefits for active members for service after 31 March 2014 (when the new scheme took effect).
- Compare this to the actual post 31 March 2014 benefits.
- Calculate the cost for each member as the value of the underpin benefits less the value of the actual benefits (ignoring members where the value of the actual benefits is higher).
- Sum these costs across all active members to give the impact of the underpin for each employer.

We have calculated this cost across all benefits (including deferred benefits for active members who are assumed to leave the scheme before retirement in the future).

At this stage, as the data was not readily available for the valuation we have not calculated any costs for members who had already left service or retired as at 31 March 2019. Given the nature of the underpin we expect any costs for this group of members to be immaterial at whole Fund. We also believe the approach applied to active members and the assumptions underlying the actuarial valuation contain prudential margins which are sufficient to cover the vast majority of such costs for the affected employers.

The LGPS Scheme Advisory Board has issued guidance on the approach to including the costs of the McCloud judgment within the 2019 LGPS actuarial valuations and this can be found at http://www.lgpsboard.org/images/Other/Advice_from_the_SAB_on_McCloud_May_2019.pdf.

Appendix E
Analysis of membership experience

The analysis below compares the actual experience over the 3 year period with the assumptions used for the 2019 valuation.

	Actual	Expected	%
Ill Health Retirements	96	80	120
Withdrawals	4,813	2,727	176
Pensioner Deaths (lives)	913	378	242

Note that actual withdrawals can include members moving to another LGPS Fund, bulk transfers and also transfers under the special transfer club terms.

Appendix F
Valuation Dashboard as agreed by Scheme Advisory Board

Past service funding position - local funding basis	
Funding level (assets/liabilities)	91%
Funding level (change since last valuation)	15%
Asset value used at the valuation (£m)	1,867
Value of liabilities (£m)	2,044
Surplus (deficit) (£m)	(177)
Discount rate(s)	4.15% p.a. past service 4.65% p.a. future service
Assumed pension increases (CPI)	2.4% p.a.
Method of derivation of discount rate, plus any changes since previous valuation	See Appendix A
Assumed life expectancies at age 65	
Average life expectancy for current pensioners - men currently age 65	22.4
Average life expectancy for current pensioners - women currently age 65	24.8
Average life expectancy for future pensioners - men currently age 45	24.0
Average life expectancy for future pensioners - women currently age 45	26.8

> The basis for the purposes of the LGPS Scheme Advisory Board funding position (the "SAB basis") is a set of assumptions determined by the SAB. Its purposes are to set out the funding position on a standardised approach so that comparisons can be made with other LGPS Funds, and to assist with the "Section 13 review" as carried out by the Government Actuary's Department. We are happy to supply further details of the SAB basis as requested.

Past service funding position - SAB basis	
Market value of assets	1,867
Value of liabilities	1,813
Funding level on SAB basis (assets/liabilities)	103%
Funding level on SAB basis (change since last valuation)	16%
Contribution rates payable	
Primary contribution rate	17.3%
Secondary contributions:	
Secondary contributions 2020/21 (£m)	15.9
Secondary contributions 2021/22 (£m)	15.3
Secondary contributions 2022/23 (£m)	15.7
Giving total expected contributions:	
Total expected contributions 2020/21 (based on assumed payroll of £264m) (£m)	61.7
Total expected contributions 2021/22 (based on assumed payroll of £269m) (£m)	62.0
Total expected contributions 2022/23 (based on assumed payroll of £274m) (£m)	63.3
Average employee contribution rate	6.2%
Employee contributions (based on assumed payroll of £264m) (£m)	16.4
Additional information	
Percentage of liabilities relating to employers with deficit recovery periods of longer than 20 years	0%
Percentage of total liabilities that are in respect of Tier 3 employers	2%

Appendix G
Rates and Adjustments Certificate issued in accordance with Regulation 62

Name of fund	Clwyd Pension Fund

Primary Contribution Rate

I hereby certify that, in my opinion, the primary rate of the employers' contribution for the whole Fund for each of the three years beginning 1 April 2020 is 17.3% of pensionable pay.

The primary rate of contribution for each employer for the three year period beginning 1 April 2020 is set out in the attached schedule.

Secondary Contribution Rate

I hereby certify that, in my opinion, the secondary rate of the employer's contribution for the whole Fund for each of the three years beginning 1 April 2020 is as follows:

2020/21 £14.9 million plus 0.4% of pensionable pay

2021/22 £14.3 million plus 0.4% of pensionable pay

2022/23 £14.7 million plus 0.4% of pensionable pay

The secondary rate of contribution for each employer for each of the three years beginning 1 April 2020 is set out in the attached schedule. The above secondary rates, and the secondary rates for each employer, where appropriate include a provision for the costs of the McCloud judgment as set out in the notes to Appendix H.

Contribution amounts payable

The total contribution payable for each employer is the total of the primary and secondary rates as detailed in the attached schedule. Contributions will be paid monthly in arrears with each payment normally being due by the 19th of the following month (or the 22nd if paid electronically or at intervals agreed with the Administering Authority) unless otherwise noted in the schedule.

Further adjustments

A further individual adjustment shall be applied in respect of each non-ill health early retirement occurring in the period of three years covered by this certificate. This further individual adjustment will be calculated in accordance with methods agreed from time to time between the Fund's Actuary and the Administering Authority.

The contributions set out in the attached schedule represent the minimum contribution which may be paid by each employer in total over the 3 years covered by the certificate. Additional contributions or a different pattern of contributions may be paid if requested by the employer concerned at the sole discretion of the Administering Authority as agreed with the Actuary. The total contributions payable by each employer will be subject to a minimum of £nil.

The individual employer contributions may be varied as agreed by the Actuary and Administering Authority to reflect any changes in contribution requirements as a result of the McCloud judgment remedy as set out in this report and/or any benefit costs being insured with a third party or parties including where the third party or parties participate in the Fund.

In cases where an element of an existing Scheme employer's surplus or deficit is transferred to a new employer on its inception, the Scheme employer's secondary contributions, as shown on the schedule to this Certificate in Appendix H, may be reallocated between the Scheme employer and the new employer to reflect this, on the advice of the Actuary and as agreed with the Administering Authority so that the total payments remain the same overall.

The Administering Authority and employer with advice from the Fund's Actuary can agree that contributions payable under this certificate can be sourced under an alternative financing arrangement which provides the Fund with equivalent cash contributions.

Regulation 62(8)

No allowance for non-ill health early retirements has been made in determining the results of the valuation, on the basis that the costs arising will be met by additional contributions. Allowance for ill health retirements has been included in each employer's contribution rate, on the basis of the method and assumptions set out in the report.

Signature:	P Middleman	M Doman
Name:	Paul Middleman	Michelle Doman
Qualification:	Fellow of the Institute and Faculty of Actuaries	Fellow of the Institute and Faculty of Actuaries
Date of signing:	31 March 2020	

Appendix H
Schedule to the Rates and Adjustments Certificate dated 31 March 2020

Employer	Primary rate 2020/21 to 2022/23	Notes	Secondary rates			Total Contribution rates		
			2020/21	2021/22	2022/23	2020/21	2021/22	2022/23
Councils								
Denbighshire County Council	17.0%	3	0.3% plus £4,258,340	0.3% plus £4,413,750	0.3% plus £4,574,940	17.3% plus £4,258,340	17.3% plus £4,413,750	17.3% plus £4,574,940
Flintshire County Council	17.3%	3	0.3% plus £4,881,830	0.3% plus £5,059,970	0.3% plus £5,244,680	17.6% plus £4,881,830	17.6% plus £5,059,970	17.6% plus £5,244,680
Wrexham County Borough Council	17.6%	3	0.6% plus £4,075,620	0.6% plus £4,075,620	0.6% plus £4,075,620	18.2% plus £4,075,620	18.2% plus £4,075,620	18.2% plus £4,075,620
Other Scheme Employers								
Coleg Cambria	16.5%	4	-1.7% of pay to 31 July then £681,470 from 1 August	£706,300	£732,120	14.8% to 31 July then 16.5% plus £681,470 from 1 August.	16.5% plus £706,300	16.5% plus £732,120

Employer	Primary rate 2020/21 to 2022/23	Notes	Secondary rates			Total Contribution rates		
			2020/21	2021/22	2022/23	2020/21	2021/22	2022/23
Glyndwr University	16.5%	4	-1.5% of pay to 31 July then 0.6% plus £329,960 from 1 August	0.6% plus £342,070	0.6% plus £354,590	15.0% to 31 July then 17.1% plus £329,960 from 1 August	17.1% plus £342,070	17.1% plus £354,590
North Wales Fire Authority	17.0%	2	£958,490	Nil	Nil	17.0% plus £958,490	17.0%	17.0%
North Wales Tribunal	18.9%	3	£19,400	£20,090	£20,870	18.9% plus £19,400	18.9% plus £20,090	18.9% plus £20,870
Town and Community Councils								
Acton Community Council	22.9%		£200	£200	£200	22.9% plus £200	22.9% plus £200	22.9% plus £200
Argoed Community Council	17.6%		(£1,300)	(£1,300)	(£1,400)	17.6% less £1,300	17.6% less £1,300	17.6% less £1,400
Bagillt Community Council	17.2%		£100	£100	£100	17.2% plus £100	17.2% plus £100	17.2% plus £100
Buckley Town Council	26.6%		(£8,400)	(£8,700)	(£9,000)	26.6% less £8,400	26.6% less £8,700	26.6% less £9,000
Caia Park Community Council	20.8%		(£10,000)	(£10,000)	(£10,000)	20.8% less £10,000	20.8% less £10,000	20.8% less £10,000
Cefn Mawr Community Council	12.2%		(£300)	(£300)	(£300)	12.2% less £300	12.2% less £300	12.2% less £300

Employer	Primary rate 2020/21 to 2022/23	Notes	Secondary rates			Total Contribution rates		
			2020/21	2021/22	2022/23	2020/21	2021/22	2022/23
Coedpoeth Community Council	20.4%		(£2,800)	(£2,900)	(£3,000)	20.4% less £2,800	20.4% less £2,900	20.4% less £3,000
Connah's Quay Town Council	17.8%		(£20,800)	(£21,600)	(£22,300)	17.8% less £20,800	17.8% less £21,600	17.8% less £22,300
Denbigh Town Council	18.5%		(£1,100)	(£1,100)	(£1,200)	18.5% less £1,100	18.5% less £1,100	18.5% less £1,200
Flint Town Council	17.5%		Nil	Nil	Nil	17.5%	17.5%	17.5%
Gresford Community Council	21.9%		Nil	Nil	Nil	21.9%	21.9%	21.9%
Gwernymynydd Community Council	28.8%		Nil	Nil	Nil	28.8%	28.8%	28.8%
Hawarden Community Council	21.8%		(£4,400)	(£4,600)	(£4,700)	21.8% less £4,400	21.8% less £4,600	21.8% less £4,700
Holywell Town Council	20.1%		Nil	Nil	Nil	20.1%	20.1%	20.1%
Hope Community Council	16.4%		£100	£100	£100	16.4% plus £100	16.4% plus £100	16.4% plus £100
Marchwiel Community Council	23.1%		£100	£100	£100	23.1% plus £100	23.1% plus £100	23.1% plus £100
Mold Town Council	17.8%		0.7% less £1,800	0.7% less £1,900	0.7% less £2,000	18.5% less £1,800	18.5% less £1,900	18.5% less £2,000
Northop Community Council	21.7%		Nil	Nil	Nil	21.7%	21.7%	21.7%

Employer	Primary rate 2020/21 to 2022/23	Notes	Secondary rates			Total Contribution rates		
			2020/21	2021/22	2022/23	2020/21	2021/22	2022/23
Offa Community Council	26.0%		0.3% less £5,400	0.3% less £5,600	0.3% less £5,800	26.3% less £5,400	26.3% less £5,600	26.3% less £5,800
Penyffordd Community Council	16.4%		(£100)	(£100)	(£100)	16.4% less £100	16.4% less £100	16.4% less £100
Prestatyn Town Council	21.5%		(£5,100)	(£5,300)	(£5,500)	21.5% less £5,100	21.5% less £5,300	21.5% less £5,500
Rhos Community Council	21.3%		0.3% less £100	0.3% less £100	0.3% less £100	21.6% less £100	21.6% less £100	21.6% less £100
Rhyl Town Council	18.0%		0.7% plus £20,400	0.7% plus £20,400	0.7% plus £20,400	18.7% plus £20,400	18.7% plus £20,400	18.7% plus £20,400
Shotton Town Council	29.4%		(£2,200)	(£2,300)	(£2,400)	29.4% less £2,200	29.4% less £2,300	29.4% less £2,400
Other Employers								
Aramark Ltd	18.8%		(£1,900)	(£2,000)	(£2,000)	18.8% less £1,900	18.8% less £2,000	18.8% less £2,000
Aura Leisure & Libraries	18.7%		(£41,300)	(£42,900)	(£44,400)	18.7% less £41,300	18.7% less £42,900	18.7% less £44,400
Bodelwyddan Castle Trust	18.2%		0.1%	0.1%	0.1%	18.3%	18.3%	18.3%
Careers Wales	17.7%		0.8% less £40,300	0.8% less £41,800	0.8% less £43,300	18.5% less £40,300	18.5% less £41,800	18.5% less £43,300
Cartref Ni Limited	20.6%		(£400)	(£400)	(£400)	20.6% less £400	20.6% less £400	20.6% less £400

Employer	Primary rate 2020/21 to 2022/23	Notes	Secondary rates			Total Contribution rates		
			2020/21	2021/22	2022/23	2020/21	2021/22	2022/23
Cartref y Dyffryn Ceiriog	25.2%		(£81,700)	(£84,700)	(£87,800)	25.2% less £81,700	25.2% less £84,700	25.2% less £87,800
Chartwells (Compass Group)	24.9%		£2,400	£2,500	£2,600	24.9% plus £2,400	24.9% plus £2,500	24.9% plus £2,600
Churchills Ltd	19.6%		Nil	Nil	Nil	19.6%	19.6%	19.6%
Civica UK Ltd	20.2%		0.7% less £45,900	0.7% less £47,600	0.7% less £49,300	20.9% less £45,900	20.9% less £47,600	20.9% less £49,300
Denbigh Youth Group	24.6%		(£2,700)	(£2,800)	(£2,900)	24.6% less £2,700	24.6% less £2,800	24.6% less £2,900
Denbighshire Leisure	16.8%		Nil	Nil	Nil	16.8%	16.8%	16.8%
Freedom Leisure	19.3%		2.4% less £33,200	2.4% less £34,400	2.4% less £35,600	21.7% less £33,200	21.7% less £34,400	21.7% less £35,600
Hafen Deg	TBC		TBC	TBC	TBC	TBC	TBC	TBC
Holywell Leisure	18.1%		(£3,900)	(£4,000)	(£4,200)	18.1% less £3,900	18.1% less £4,000	18.1% less £4,200
Home Farm Trust Ltd	20.0%		0.1% less £11,100	0.1% less £11,500	0.1% less £11,900	20.1% less £11,100	20.1% less £11,500	20.1% less £11,900
Midshire Signature Services Limited	25.5%		Nil	Nil	Nil	25.5%	25.5%	25.5%
Newydd Catering & Cleaning	21.8%		(£60,500)	(£62,600)	(£65,000)	21.8% less £60,500	21.8% less £62,600	21.8% less £65,000

Employer	Primary rate 2020/21 to 2022/23	Notes	Secondary rates			Total Contribution rates		
			2020/21	2021/22	2022/23	2020/21	2021/22	2022/23
Wrexham Glyndwr Students' Union	11.5%		£880	£880	£980	11.5% plus £880	11.5% plus £880	11.5% plus £980

Important notes to the Certificate:

1. The percentages shown are percentages of pensionable pay and apply to all members, including those who are members under the 50:50 option under the LGPS.

2. The employer has chosen to pay their required £ secondary rate over the three years as one payment. Cash payments in respect of the total £ lump sums are payable by 30 April 2020. The amounts shown each year have been reduced to reflect the early payment.

3. The employer has chosen to pay each year's £ secondary rate as one payment each year. These annual cash payments are payable by 30 April of the year in which they are due. These amounts have been reduced to reflect this early payment.

4. The employer has chosen to pay each year's £ secondary rate as one payment each year. These annual cash payments are payable by 31 August of the year in which they are due. These amounts have been reduced to reflect this early payment.

5. With the agreement of the Administering Authority employers may also opt to pay any other element of their employer contributions in advance instead of monthly amounts, with either all three years being paid in April 2020 or payment being made in the April of the year in question. The cash amounts payable will be reduced in return for this early payment as follows:

    - Payments made in the April of the certified year will be reduced by 2.01% (i.e. the above amounts will be multiplied by 0.9799)
    - 2021/22 payments made in April 2020 will be reduced by 5.92% (i.e. the above amounts will be multiplied by 0.9408)
    - 2022/23 payments made in April 2020 will be reduced by 9.67% (i.e. the above amounts will be multiplied by 0.9033)

6. Where an employer initially opts to prepay contributions and this subsequently does not happen, then the contribution schedule will be updated to reflect the undiscounted contribution amounts which would be payable monthly or at an interval otherwise agreed with the Administering Authority.

7. Where the secondary rate is a £ deduction to the primary rate due to an employer being in surplus, the total annual contributions payable by each employer will be subject to a minimum of £nil i.e. no monies can be refunded to an employer whilst they participate in the Fund.

8. Employers were given the option of whether to pay additional contributions over 2020/23 in respect of the potential additional McCloud costs or any other factors. Where employers did not opt to pay the additional contributions for the McCloud costs, they are expected to make provision for this within their budgets. Once the final remedy for McCloud is known, additional contributions will be required from such employers, which will include allowance for any additional McCloud liabilities built up after 31 March 2019. Employers will therefore be notified of the additional payments required once the remedy has been agreed and the costs are known. This certificate will then be updated if appropriate to reflect these changes to contribution requirements. If an employer has made allowance in their contributions, then no adjustment will be made. Any contribution changes will take effect from a date to be determined by the Administering Authority. The majority of employers where there is a potential cost (as assessed on the methodology in Appendix D) have opted to include the provision in their contributions over the certificate.

9. The Fund has an internal captive insurance arrangement in place in order to pool the risks associated with ill health retirement costs. The captive has been designed for employers that could be materially affected by the ill health retirement of one or more of their members. Those employers (both existing and new) that will be included in the captive are Community related Admitted Bodies and Town and Community Councils. These employers will be notified of their participation. New employers entering the Fund who fall into this category will also be included. For those employers in the ill-health captive arrangement, allowance for ill health retirements has been included in each employer's contribution rate, on the basis of the method and assumptions set out in the report. Details of the arrangement are set out in the FSS.

Appendix I
Glossary

Actuarial Valuation: an investigation by an actuary into the ability of the Fund to meet its liabilities. For the LGPS the Fund Actuary will assess the funding level of each participating employer and agree contribution rates with the administering authority to fund the cost of new benefits and make good any existing deficits as set out in the separate Funding Strategy Statement.

Best Estimate Assumption: an assumption where the outcome has a 50/50 chance of being achieved.

Bonds: loans made to an issuer (often a government or a company) which undertakes to repay the loan at an agreed later date. The term refers generically to corporate bonds or government bonds (gilts).

Career Average Revalued Earnings Scheme (CARE): with effect from 1 April 2014, benefits accrued by members in the LGPS take the form of CARE benefits. Every year members will accrue a pension benefit equivalent to 1/49th of their pensionable pay in that year. Each annual pension accrued receives inflationary increases (in line with the annual change in the Consumer Prices Index) over the period to retirement.

CPI: acronym standing for "Consumer Prices Index". CPI is a measure of inflation with a basket of goods that is assessed on an annual basis. The reference goods and services differs from those of RPI. These goods are expected to provide lower, less volatile inflation increases. Pension increases in the LGPS are linked to the annual change in CPI.

Deficit: the extent to which the value of the Fund's past service liabilities exceeds the value of the Fund's assets.

Discount Rate: the rate of interest used to convert a cash amount e.g. future benefit payments occurring in the future to a present value.

Employer Covenant: the degree to which an employer participating in an occupational pension scheme is willing and able to meet the funding requirements of the scheme.

Employer's Future Service Contribution Rate: the contribution rate payable by an employer, expressed as a % of pensionable pay, as being sufficient to meet the cost of new benefits being accrued by active members in the future. The cost will be net of employee contributions and will include an allowance for the expected level of administrative expenses. It is normally the same as an employer's Primary Contribution Rate under the Regulations.

Employer's Primary Contribution Rate: the contribution rate required to meet the cost of the future accrual of benefits including ancillary, death in service and ill health benefits together with administration costs. It is expressed as a percentage of pensionable pay, ignoring any past service surplus or deficit, but allowing for any employer-specific circumstances, such as its membership profile, the funding strategy adopted for that employer, the actuarial method used and/or the employer's covenant. The Primary Contribution Rate for the whole Fund is the weighted average (by payroll) of the individual employers' Primary Contribution Rates.

Employer's Secondary Contribution Rate: an adjustment to the Primary Rate to reflect any past service deficit or surplus, to arrive at the rate each employer is required to pay. The Secondary Rate may be expressed as a percentage adjustment to the Primary Rate, and/or a cash adjustment in each of the three years beginning 1 April in the year following that in which the valuation date falls. The Secondary Rate is specified in the Rates and Adjustments Certificate. For any employer, the rate they are actually required to pay is the sum of the Primary and Secondary Rates. Secondary Rates for the whole fund in each of the three years shall also be disclosed. These will be calculated as the weighted average based on the whole fund payroll in respect of percentage rates and as a total amount in respect of cash adjustments.

Equities: shares in a company which are bought and sold on a stock exchange.

Funding Strategy Statement (FSS): This is a key governance document that outlines how the administering authority will manage employer's contributions to the Fund.

Guaranteed Minimum Pension (GMP): This part of a member's pension which was earned between 6 April 1978 and 5 April 1997 and which replaces part of that member's State Scheme benefits in respect of that period.

Investment Strategy: the long-term distribution of assets among various asset classes that takes into account the Funds objectives and attitude to risk.

McCloud Judgment: This refers to the linked legal cases of Sargeant and McCloud, and which found that the transitional protections (which were afforded to older members when the public service pension schemes were reformed in 2014/15) constituted unlawful age discrimination.

Past Service Liabilities: this is the present value of the benefits accrued by members up to the valuation date. It is assessed based on a set of assumptions agreed between the Administering Authority and the Actuary.

Percentile: A method of ranking a series of outcomes. For example, a 10th percentile outcome means that only 10% of results would be expected to be as good as or better than the 10th percentile and 90% of results would be expected to be worse.

Prepayment: the payment by employers of contributions to the Fund earlier than that certified by the Actuary. The amount paid will be reduced compared to the certified amount to reflect the early payment.

Present Value: the value of projected benefit payments, discounted back to the valuation date.

Primary rate of the employers' contribution: the contribution rate required to meet the cost of the future accrual of benefits including ancillary, death in service and ill health benefits together with administration costs. It is expressed as a percentage of pensionable pay, ignoring any past service surplus or deficit, but allowing for any employer-specific circumstances, such as its membership profile, the funding strategy adopted for that employer, the actuarial method used and/or the employer's covenant. The Primary rate for the whole fund is the weighted average (by payroll) of the individual employers' Primary rates.

Prudent Assumption: an assumption where the outcome has a greater than 50/50 chance of being achieved i.e. the outcome is more likely to be overstated than understated. Legislation and guidance requires the assumptions adopted for an actuarial valuation overall to be prudent.

Real Return or Real Discount Rate: a rate of return or discount rate net of CPI inflation.

Recovery Plan: a strategy by which an employer will make up a funding deficit over a specified period of time ("the recovery period", as set out in the Funding Strategy Statement.

SAB Funding Basis or SAB Basis: a set of actuarial assumptions determined by the LGPS Scheme Advisory Board (SAB). Its purposes are to set out the funding position on a standardised approach so that comparisons can be made with other LGPS Funds, and to assist with the "Section 13 review" as carried out by the Government Actuary's Department. As an example, the real discount rate over and above CPI used in the SAB Basis as at 31 March 2019 was 2.4% p.a., so it can be substantially different from the actuarial assumptions used to calculated the Fund's solvency funding position and contribution outcomes for employers.

Solvency/Funding Level: the ratio of the value of the Fund's assets and the value of the Fund's liabilities expressed as a percentage.

Solvency Funding Target: an assessment of the present value of benefits to be paid in the future. The desired funding target is to achieve a solvency level of a 100% i.e. assets equal to the past service liabilities assessed on the ongoing concern basis.

50/50 Scheme: in the LGPS, active members are given the option of accruing a lower benefit in the 50/50 Scheme, in return for paying a lower level of contribution.

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