

## Funding update as at 31 December 2021

This paper has been commissioned by and is addressed to Gloucestershire County Council as Administering Authority of the Gloucestershire Pension Fund (“the Fund”).

Its purpose is to provide an update on the funding position and risk metrics as at 31 December 2021 and how these compare to the position at the last formal valuation of the Fund (31 March 2019). The results consider the Fund as a whole and not the positions of individual employers (which may vary materially). This paper contains a high level summary of the results (and charts). Further details on the methodology, data, reliances and limitations of these results is contained within the Appendix and the Fund’s 2019 valuation report.

Key points to note on the commentary of this funding update are:

- The funding position is only a snapshot in time and is based on a single set of assumptions about the future. The funding level is therefore extremely sensitive to the choice of assumptions and market movements, in particular the expected future investment return assumption.
- Actual benefit payments in the future will be in respect of both service accrued up to today (“past service”) and service that will be accrued in the future (“future service”). The funding position presented is only in respect of **past service** benefits.
- The assumptions have been derived in line with the Fund’s current Funding Strategy Statement (with the exception of the assumed future investment return, which has been set in line with the Fund’s desired level of prudence for the upcoming 2022 formal valuation i.e. a 75% likelihood of the future investment return being achieved, compared to 70% at 31 March 2019). The approach to setting all assumptions will be reviewed as part of the next formal valuation; and

- The judgements relating to McCloud and Goodwin will impact employers differently (the above analysis doesn’t make any allowance for these matters).

### Executive summary

Reported funding position	31 March 2019	31 December 2021
Assets (£m)	2,379	3,227
Past service liabilities (£m)	2,338	2,737
<b>Surplus/(Deficit) (£m)</b>	<b>41</b>	<b>490</b>
Funding level	102%	118%
Assumed future investment return	4.2%	3.7%
Likelihood of achieving this return*	70%	75%
Fully funded target	31 March 2019	31 December 2021
Funding target	100%	100%
Future investment return required to be 100% funded	4.1%	2.8%
<b>Likelihood of achieving this return*</b>	<b>71%</b>	<b>85%</b>

\* likelihood of the Fund’s portfolio achieving these returns over the next 20 years

**Past service funding position:** The reported past service funding position has improved. The Fund has a surplus of £490m at 31 December 2021 (compared to a surplus of £41m at 31 March 2019). The improvement has been largely driven by strong investment performance since 31 March 2019.

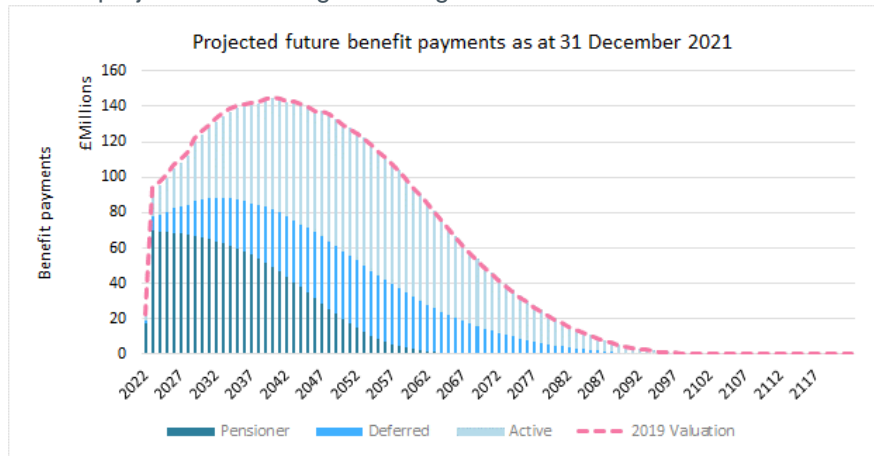
**Investment outlook:** Prudent expectations of future investment returns have fallen to 3.7% p.a. at 31 December 2021 based on a 75% likelihood of being achieved (at 31 March 2019, the equivalent return was 4.2%p.a. based on a 70% likelihood of being achieved).

**Fully funded required rate:** The likelihood of achieving the future investment returns needed to have sufficient assets to pay past service benefits has increased since the last valuation (there is now an 85% chance of achieving the returns needed).

Therefore, **the Fund is now more likely to have sufficient assets to meet earned benefit payments than at the previous valuation.**

## Liabilities

Benefit projections allowing for changes in inflation:



The **blue bars** are the projected annual future benefits payments at 31 December 2021 and the **pink line** on shows the total benefit payment projections at 31 March 2019.

Actual pension increases at April 2020 and April 2021 were less than expected (1.7% vs. 2.3% and 0.5% vs 2.3% respectively).

Market derived long-term future inflation expectations have risen since 31 March 2019 (noting that no allowance has been made for any changes resulting from RPI reform).

The impact of recent lower than expected pension increases has been offset by the increase in long-term future inflation expectations, resulting in an increase in the projected benefit payments as at 31 December 2021.

### Funding level versus future investment return assumption

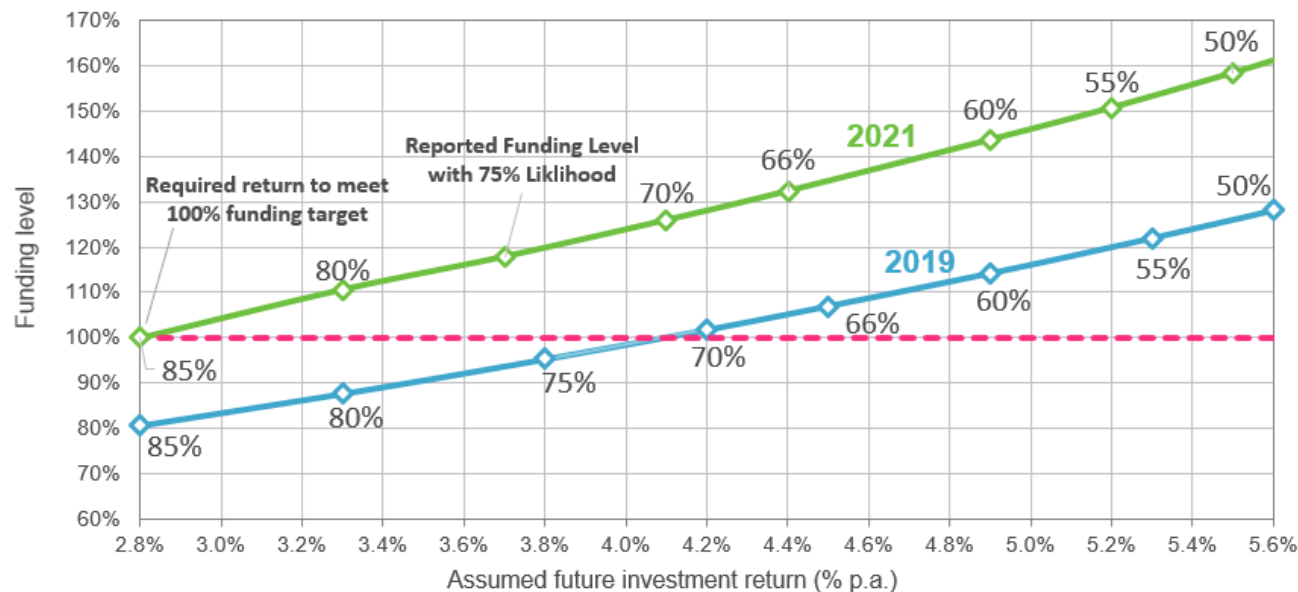
At 31 December 2021 the estimated funding position has improved, with the surplus increasing from £41m at 31 March 2019 to £490m at 31 December 2021.

Funding position	31 March 2019	31 December 2021
Assets (£m)	2,379	3,227
Past service liabilities (£m)	2,338	2,737
<b>Surplus/(Deficit) (£m)</b>	<b>41</b>	<b>490</b>
<b>Funding level</b>	<b>102%</b>	<b>118%</b>

The funding level has been calculated using a future investment return assumption which has a 75% likelihood of being achieved (in line with the Fund’s desired level of prudence for the upcoming 2022 formal valuation). The reported funding level is extremely sensitive to this likelihood.

The chart below shows how the funding level varies under different future investment return assumptions. The likelihood of achieving these returns is noted next to each point of the chart.

- From this chart, we can see that the likelihood of achieving any given future investment return remains broadly the same as 2019.
- However, regardless of the investment return assumption used, there has been an improvement in the funding position at 31 December 2021 compared to the 2019 valuation, reflecting an increase in assets held today per pound of benefit to be paid out in future.
- This improvement has been driven by strong investment performance over the period (32.1% since 31 March 2019).



## Indicative impact on future contributions

### Secondary rate contributions

It can be inferred that the improved past service funding position at 31 December 2021 is likely to have a positive impact on Secondary rate contributions at the next valuation for the average employer, all else being equal.

Of course any changes in funding position (and any impact on contributions rates) will be varied across the Fund's employers and is dependent on each individual employer's membership and funding plans.

### Primary rate contributions

As discussed above, the past service funding position has improved. However, the assets held today only cover past service benefits – we still need to fund those benefits yet to be earned (i.e. Primary Rate contributions in respect of future accrual). For the average fund, two-thirds of the benefit payments made over the next 50 years will be in respect of benefits yet to be earned.

Compared to the 2019 valuation, we expect a more challenging economic outlook in general which would apply upward pressure to Primary Rates. The key drivers of the expected increases in Primary Rates are

- Lower yield environment in the future;
- Higher future inflation expectations; and
- Increased market volatility leading to wider spreads on yields and inflation.

While improvement in funding positions is good news for the Fund (and the Employers), this only serves to limit the impact of the above.

## Summary

Combining both these factors together, if the Fund's funding strategy and investment strategy remained static, we may expect funding plans to be broadly unchanged at the next formal valuation (31 March 2022). However this may vary between employers.

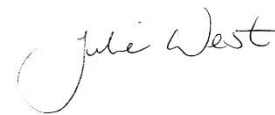
## Reliances and limitations

This paper has been prepared for Gloucestershire County Council as Administering Authority of the Gloucestershire Pension Fund for the purpose described above. It has not been prepared for use for any other purpose and should not be so used. The paper should not be disclosed to any third party except as required by law or regulatory obligation or with our prior written consent. We accept no liability where the paper is used by or disclosed to a third party unless we have expressly accepted such liability in writing. Where this is permitted, the paper may only be released or otherwise disclosed in a complete form which fully discloses our advice and the basis on which it is given.

The following Technical Actuarial Standards are applicable in relation to this advice, and have been complied with where material and to a proportionate degree:

- TAS100

This report together with the formal valuation report for the Fund (issued March 2020) and the Fund's Funding Strategy Statement set out the aggregate of my advice.



Julie West FFA  
For and on behalf of Hymans Robertson LLP  
February 2022

## Appendix

### Assumptions and methodology

#### Liabilities

All demographic and financial assumptions underlying the benefit projections have been derived as per the Funding Strategy Statement in force as at the 31 March 2019 formal valuation of the Fund, with the exception of the assumed future investment return and the future inflation assumption (which affects the rate of future pension increases, CARE revaluation and salary increases)/

No allowance has been made for any other changes in the formulation of underlying actuarial assumptions. For example, future assumed long-term inflation expectations may be affected by the recent RPI reform announcement (RPI is expected to align with CPIH from 2030 onwards) or longevity assumptions may need to be revisited in light of any emerging data on the long-term health impact of Covid-19. As part of the 2022 valuation all assumptions will be revisited, and any changes deemed necessary may have an impact on the funding position.

Further details about the assumptions can be found in the 2019 formal valuation report dated March 2020.

The future long-term inflation assumption used in the benefit projections as at 31 December 2021 is 2.4% p.a.. Therefore, as at 31 March 2021 we have assumed that:

- Future pension increases are 2.4% p.a.
- Future CARE pot revaluation is 2.4% p.a.
- Future salary increases are 2.7% p.a.

The benefit projections assume that membership experience since 31 March 2019 has been in line with the assumptions made. At a whole fund level, this assumption is reasonable to make and, for the purpose of this paper, we do not expect this to result in a material inaccuracy.

We have also allowed for additional benefit accrual between 1 April 2019 to 31 December 2021. This allows comparison with the Fund's asset value as at 31 December 2021.

#### Future investment returns

To calculate the expected future investment returns, we have used our proprietary Economic Service Scenario ("ESS") model. Further details about the ESS model, and the calibration of the model as at 31 March 2019, can be found in the 2019 valuation formal report dated March 2020.

The calibration of the model as at 31 December 2021 is detailed below. The following figures have been calculated using 5,000 simulations of the ESS, calibrated using market data as at 31 December 2021. All returns are shown net of fees. Percentiles refer to percentiles of the 5,000 simulations and are the annualised total returns over 5, 10 and 20 years, except for the yields which refer to the simulated yields for at that time horizon. Only the overall Fund portfolio returns are shown, however similar information for separate asset classes is available on request.

The portfolio returns are based on the Fund's current strategic portfolio of assets (further details on this portfolio are detailed in the Fund's Investment Strategy Statement, dated December 2021.)

	% p.a.	Portfolio returns	Inflation (CPI)	17 year real yield
5 years	16th %'ile	-0.1%	1.6%	-2.6%
	50th %'ile	4.4%	3.1%	-1.7%
	84th %'ile	8.8%	4.7%	-0.8%
10 years	16th %'ile	1.4%	1.2%	-2.0%
	50th %'ile	4.7%	2.9%	-0.8%
	84th %'ile	7.9%	4.5%	0.5%
20 years	16th %'ile	2.9%	0.9%	-0.7%
	50th %'ile	5.5%	2.5%	1.0%
	84th %'ile	8.1%	4.0%	2.7%
	Volatility (1 year)	10%	1.3%	

The current calibration of the model indicates that a period of outward yield movement is expected. For example, over the next 20 years our model expects the 17 year maturity annualised real (nominal) interest rate to rise from -2.6% (1.2%) to 1.0% (3.2%).

### Model limitations

The models used to calculate the results in the paper make some necessary simplifying assumptions. I do not consider these simplifications to be material and I am satisfied that they are appropriate for the purposes described in this report.

### Sensitivity of results

The results in this report are dependent on a number of factors including the membership details, current financial conditions, the outlook for future financial conditions and demographic trends such as longevity. Changes in each of these factors can have a material impact on the results. I have not sought to quantify the impact of differences in the above because of the complex interactions between them. If further information about the sensitivity of the results to different data or assumptions is required, this can be provided on request.

### Funding Risks

Please see the FSS for details of the funding risks that apply to the future ability of the Fund to pay all members' benefits. These include, but are not limited to:

- Market risks – these include investment returns being less than anticipated or liabilities increasing more than expected due to changes in market conditions underlying the financial assumptions (e.g. inflation or pay increases above that assumed etc.).
- Demographic risks – these include anything that affects the timing or type of benefits (e.g. members living longer than anticipated, fewer members opting into the 50/50 option, etc.).
- Regulatory risks – the LGPS is a statutory scheme. There is a risk that central Government legislation could significantly change the cost of the scheme in future.

**In particular, the benefit structure of the LGPS is currently under review as a result of the consultation on the McCloud and Sargeant judgement, HM Treasury's and Scheme Advisory Board's cost-sharing valuations as well as the recent outcome of the Goodwin tribunal. Benefit changes as a result of these issues may materially affect the value of benefits earned by members both in the past and future. I have made no direct allowance for these changes and may need to review my calculations once the outcomes are known.**

- Administration and Governance risks – failures in administration processes can lead to incorrect actuarial calculations. For example, where membership data is not up to date (e.g. leaver forms not being submitted in a timely matter) material inaccuracies in respect of the level of deficit and contributions may occur at future valuations.

- Resource and Environmental risks – i.e. risks relating to potential resource constraints and environmental changes, and their impact on Fund employers and investments: such risks exist and may prove to be material. Given the lack of relevant quantitative information available specifically relevant to the Fund, I have not explicitly incorporated such risks in this advice. The Administering Authority may wish to seek direct advice on these risks.