

## Update on funding position as at 31 March 2021

### Purpose and scope

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 support the Fund’s Pension Committee (“the Committee”) in understanding and monitoring the Fund’s liabilities between formal valuations.

### Key results

- The past service position of the Fund has improved since 31 March 2019. This can be considered in two ways:
  - Based on a level of investment return of 4.1%, the fund currently has sufficient assets to pay all accrued benefits. The amount of additional assets has increased from £41m to **£409m**; or
  - The investment return required to have sufficient assets to pay all accrued benefits without further payments has decreased from 4.1% to **3.2%**. The likelihood of achieving the required return has increased from 71% to **80%**.
- However, prudent expectations of future investment returns have **fallen** from 4.2% to **4.1%** based on the Fund’s current investment strategy (and a 70% likelihood of success). This will increase the cost of providing benefits that continue to be earned in the future.

The Fund and Committee should continue to monitor the position prior to the next formal valuation.

Results in this paper are in respect of the Fund as a whole. At the next formal valuation, the results for individual employers will be assessed and these may be materially different to the whole fund. Therefore the impact on contributions shown above should not be used for budgeting purposes by any of the Fund’s employers.

Information regarding the data, assumptions, methodology and funding risks associated with the results in this paper are contained in the Appendix.

### Useful Definitions

**The Fund’s liabilities:** The future benefit payments due to members expressed as a single value (with an allowance for future expected investment returns).

**Past service liabilities:** Refers to benefit payments due in respect of service accrued up to today.

**Future service liabilities:** Refers to benefit payments that will be earned in respect of service after today.

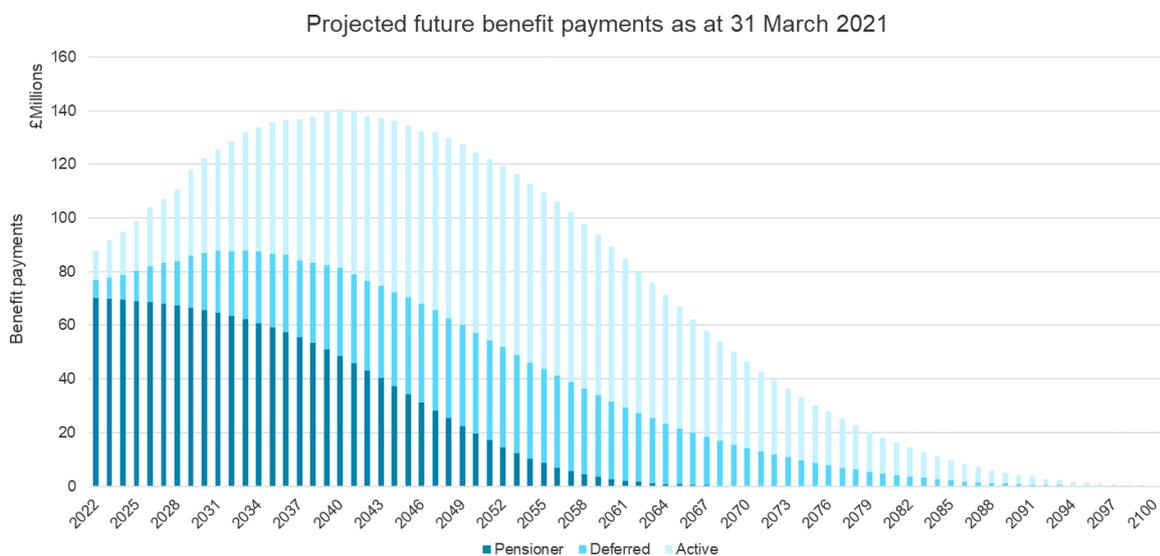
**Assets:** the money held to meet benefit payments (which is built up by contributions from employees and employers, and investment returns earned).

**Funding level:** A comparison of the past service liabilities and the assets held to meet those liabilities.

### Past service liabilities

The chart shows the projected payments due to all members in respect of service earned up to 31 March 2021. The projected benefit payments are based on the membership data and the financial and demographic assumptions used for the 2019 formal valuation.

**Chart 1**



- **Actives:** those members who are still participating in the Fund and accruing service
- **Deferreds:** those members who are no longer contributing to the Fund but are yet to retire
- **Pensioners:** those members currently in receipt of their benefits

Important points to note from the chart are:

- Currently, the majority of benefit payments are in respect of pensioner members. However, some benefits are expected to also be paid to members who were deferred and active at the last formal valuation and have either since retired or some other benefit crystallisation event has taken place e.g. death-in-service.
- Over time, the benefit payments will transition from being mostly in respect of pensioners to deferred and active members (i.e. the pensioners of the future). This is expected as pensioners are older than deferred and active members and payment of benefits ceases upon death.
- The timeframe for benefits payable in respect of service accrued up to 31 March 2021 is 80+ years. This emphasises the long-term nature of the Fund.

### What has changed since 2019?

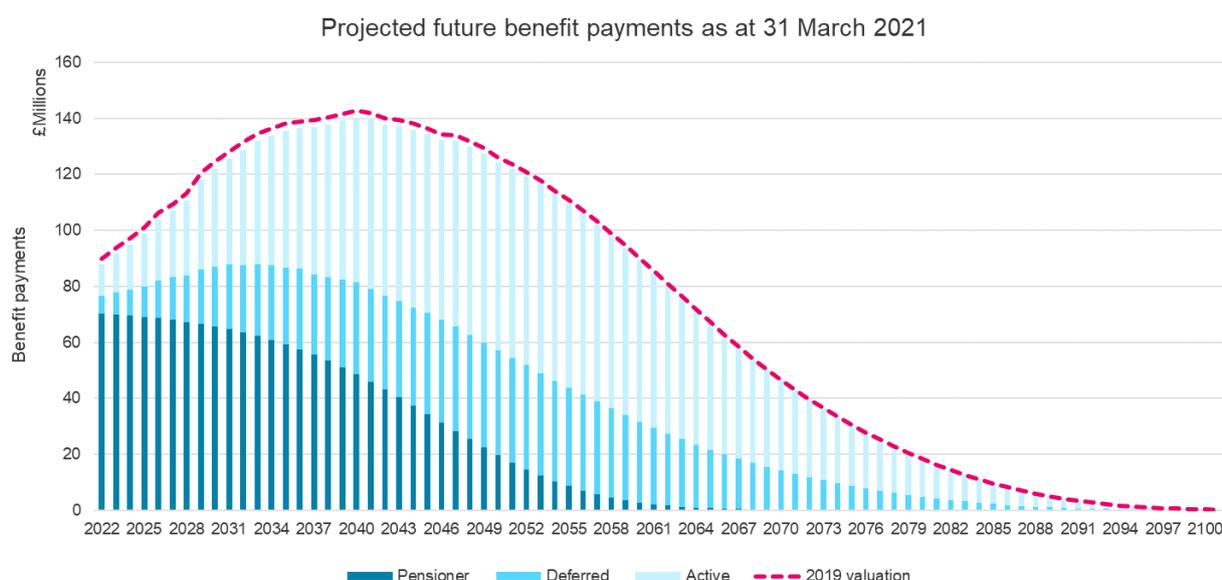
Pension Increase:

- Assumed Increases in 2019 = 2.3% per annum
- Actual increase in April 2020 = 1.7%
- Actual increase in April 2021 = 0.5%
- New long-term market expectation = 2.3% per annum

The impact of this means the Fund is expecting to pay out slightly less benefits than it did at the formal valuation. The pink line on Chart 2 below shows the total projected annual future benefit payments as at 31 March 2019 (in line with Chart 1 above).

**Technical Note:** Government have changed the way RPI is calculated. This doesn't impact CPI which is the inflation measure on which LGPS pension increases are based, but the changes in RPI definitions mean it's more difficult to assess the market's expectation of future CPI. We may need to review this assumption at the formal valuation.

## Chart 2



### Are current assets sufficient to meet benefits earned to date?

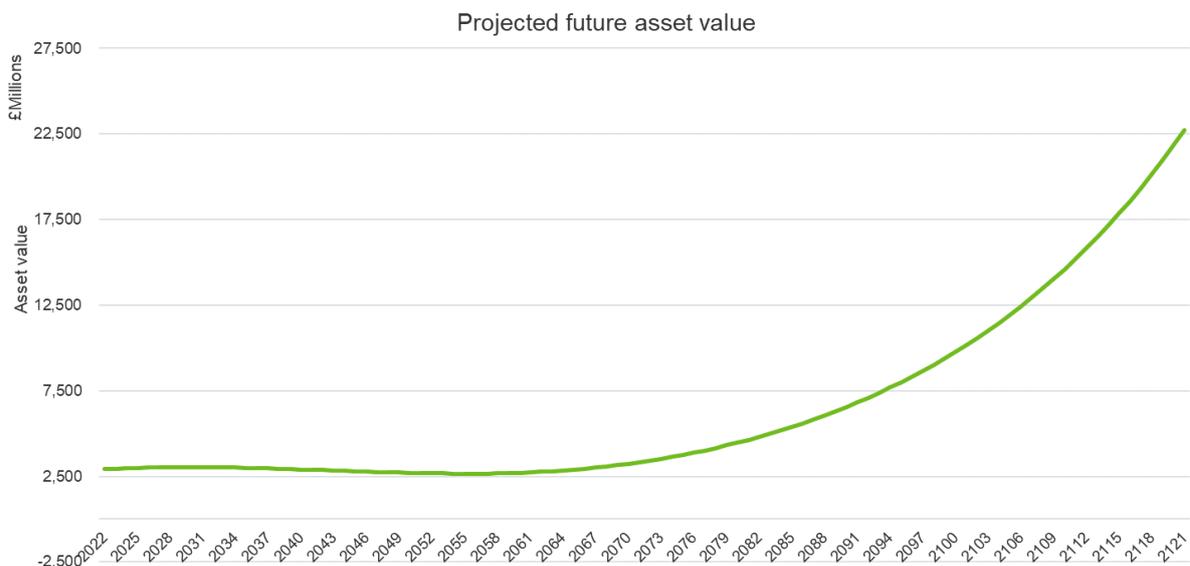
As at 31 March 2021, the Fund's asset value was £2,902m. One measure of the health of the Fund is considering how likely it is that the Fund's assets are sufficient to meet benefit payments earned to date.

We can do this by projecting the value of the Fund's assets over time, allowing for investment returns to be earned and benefit payments to be made.

At 31 March 2021 and based on the Fund's asset allocation, we estimate that the Fund's assets have a 70% likelihood of achieving an annual return of at least 4.1% p.a. (at 31 March 2019, the equivalent return was 4.2%). We have calculated the Fund's liabilities assuming a 4.1% future investment return.

Chart 3 below details the projected Fund asset value over the next 100 years. Again, the figures are in nominal terms.

Chart 3



Important points to note from the chart are:

It is estimated that the Fund's assets as at 31 March 2021 will be sufficient to pay all future benefit payments due.

In order to meet all future benefit payments due, the Fund currently:

- has a surplus of £409m over the assets required as at 31 March 2021 based on a future investment return of 4.1% p.a. (such that together with investment return there is enough to pay benefits when they fall due); or
- requires future investment returns of at least 3.2% p.a. (which we estimate that there is a 80% likelihood of achieving based on the current allocation) i.e. the Fund is less reliant on future investment returns than it was at the previous valuation.

The long-term shape of the chart reflects the fact that investment returns are compounded. At later years, when the projected benefit payment is very small, the compounding of future returns results in the observed exponential growth. It is important that such growth is very sensitive to small changes in the inputs. Further discussion of this is included in the Appendix.

### How does this compare to 2019?

It is helpful for comparison purposes to consider and compare the level of cash injection and/or required return between dates to inform whether the Fund is in a more favourable position (or otherwise).

At the 31 March 2019 valuation, the Fund's assets were sufficient to pay all future benefit payments based on an assumed investment return of 4.2% p.a.. It was estimated that the Fund would have:

- a surplus £41m of assets as at 31 March 2019 (based on investment returns of 4.2% p.a.); or would require
- future investment returns of at least 4.1% p.a. (which were estimated to be achievable in c.71% of future outcomes).

Comparing both of these figures to the equivalent as at 31 March 2021, we note that:

- the past service funding surplus has increased from £41m to £409m; and
- the required investment return to have sufficient assets has fallen from 4.1% p.a. to 3.2% p.a., with a corresponding increase from 71% to 80% in the likelihood of achieving that return.

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

Chart 4 shows how the funding level varies with the future investment return assumption at 31 March 2021 (green line). For comparison, we have also shown the results of the same analysis as at 31 March 2019 (blue line). Along each line we have highlighted points which show the likelihood of the Fund's assets achieving the corresponding assumed future investment return. The likelihoods are those that were estimated at the relevant date i.e. 31 March 2019 or 31 March 2021.

**Chart 4**



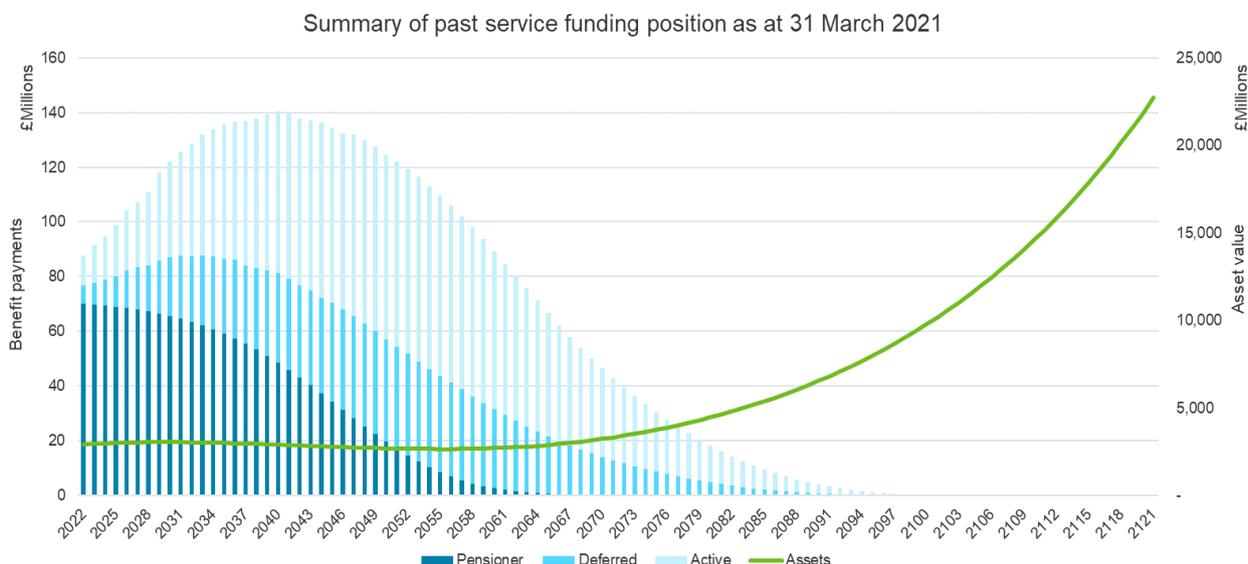
From this chart, we can see that regardless of the investment return assumption used, there has been a genuine improvement in the funding position at 31 March 2021 compared to the 2019 valuation, reflecting an increase in assets held today per pound of benefit to be paid out in future.

However, the likelihood of the Fund's asset achieving a given level of future investment return has also decreased which will put upwards pressure on the cost of providing benefits in the future.

### Summary

Chart 5 below combines the liability and asset sides of the funding balance sheet to provide an overall view of the past service funding position.

**Chart 5**



**As at 31 March 2021, the past service funding position has improved. Despite the slight worsening in long term future investment return prospects, this is primarily due to good investment returns since 31 March 2019. However, lower expected future investment returns will increase the cost of providing future service benefits.**

The past service position is summarised below with a comparison to the 2019 formal valuation results:

	31 March 2019	31 March 2021
Assumed future investment return	4.2%	4.1%
Salary increases	2.6%	2.7%
Pension increases	2.3%	2.3%
Assets	£2,379m	£2,902m
Past service liabilities	£2,338m	£2,493m
Surplus / (Deficit)	£41m	£409m
Funding Level	102%	116%
Investment return required to have sufficient assets to pay accrued benefits	4.1%	3.2%

Contribution rates will be recalculated at the formal valuation as at 31 March 2022. The funding strategy will also be reviewed as part of that valuation, where the time horizon and required likelihood of success will be reassessed for all employers.

### Action for the Fund

The paper has been provided for information purposes only to help understand how the funding risks have changed since the last formal valuation when the current funding strategy was agreed. As the objective of the Fund is to pay benefits to members, it is helpful to be aware if the current assets and contributions are more or less likely to be sufficient to meet those benefits.

This paper does not seek to propose any changes to the Fund's funding or investment strategy. Furthermore, the contribution rate figures quoted should not be taken as suggestions for rates that will payable at the next formal valuation or advice that contribution rates need to be amended before the next valuation.

### 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.

Prepared by:-



Julie West FFA

7 June 2021

For and on behalf of Hymans Robertson LLP

## Appendix

### Data

The benefit projections are based on membership data supplied for the 31 March 2019 formal valuation of the Fund. Further details about the data can be found in the 2019 valuation formal valuation report dated March 2020.

### Assumptions and methodology

#### Liabilities

All demographic and financial assumptions underlying the benefit projections are as per the 31 March 2019 formal valuation with the exception of the future inflation assumption (which affects the rate of future pension increases, CARE revaluation and salary increases).

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

The future long-term inflation assumption used in the benefit projections as at 31 March 2021 is 2.3% p.a.. Therefore, as at 31 March 2021 we have assumed that:

Future pension increases are 2.3% p.a.

Future CARE pot revaluation is 2.3% p.a.

Future salary increases are 2.6% 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 March 2021. This allows comparison with the Fund's asset value as at 31 March 2021.

To calculate the updated future service cost, we have used our proprietary Economic Service Scenario ("ESS") model, and the same methodology used to set employer contribution rates at the last formal valuation. 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 contribution rate setting methodology is discussed in Appendix D of the Fund's current Funding Strategy Statement (available on the Fund's website).

The calibration of the model as at 31 March 2021 is detailed below. The following figures have been calculated using 5,000 simulations of the ESS, calibrated using market data as at 31 March 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.

		Annualised total returns							Inflation (RPI)	17 year real yield (RPI)	17 year yield
		Cash	Index Linked Gilts (medium)	Fixed Interest Gilts (medium)	UK Equity	Overseas Equity	Property	CorpMedium A			
5 years	16th %ile	-0.3%	-3.2%	-2.5%	-3.9%	-3.6%	-3.5%	-2.8%	2.0%	-2.4%	0.8%
	50th %ile	0.4%	-0.3%	0.1%	4.3%	4.4%	2.5%	0.1%	3.6%	-1.6%	1.9%
	84th %ile	1.2%	2.6%	2.6%	12.3%	12.4%	8.8%	2.8%	5.2%	-0.7%	3.1%
10 years	16th %ile	0.1%	-2.5%	-1.1%	-0.9%	-1.0%	-1.3%	-1.0%	1.9%	-1.8%	1.0%
	50th %ile	1.1%	-0.5%	0.3%	4.8%	5.0%	3.2%	0.6%	3.5%	-0.5%	2.4%
	84th %ile	2.3%	1.6%	1.6%	10.7%	10.9%	8.0%	2.1%	5.2%	0.7%	4.1%
20 years	16th %ile	0.6%	-2.0%	0.2%	1.4%	1.3%	0.8%	0.5%	1.2%	-0.7%	1.3%
	50th %ile	2.0%	-0.3%	1.0%	5.8%	5.8%	4.2%	1.6%	2.8%	1.0%	3.2%
	84th %ile	3.6%	1.5%	1.7%	10.4%	10.3%	8.1%	2.5%	4.4%	2.7%	5.7%
	<b>Volatility (Disp) (1 yr)</b>	0%	7%	7%	17%	17%	14%	8%	1%		

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 -2.3% (1.3%) to 1.0% (3.2%).

## Assets

The asset value as at 31 March 2021 has been provided by the Administering Authority.

The return on assets since the last formal valuation has been 18.8%.

To derive the level of likelihood associated with certain level of expected future returns, we have used the ESS model as described above and the Fund's current strategic asset allocation:

% allocation	
UK equities	19%
Overseas equities	40%
Infrastructure	4%
Private equity	5%
<b>Total growth assets</b>	<b>68%</b>
Index-linked gilts	0%
Fixed interest gilts	0%
High yields bonds	17%
<b>Total protection assets</b>	<b>17%</b>
Multi-asset Credit	7%
Property	8%
<b>Total income assets</b>	<b>15%</b>

## 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.