Update on funding position as at 31 March 2021

Purpose and scope

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

Its purpose is to provide the Fund’s officers (and committee members) with an update on the overall fund level funding position as at 31 March 2021 and how it compares to the position at the last formal valuation of the Fund (31 March 2019).

Background

The Fund officers have traditionally been presented with an updated whole fund funding level figure to monitor funding level progression between formal valuations. The funding level is derived as the ratio of the value of the Fund’s assets to the value of its accrued liabilities. Whilst presenting this figure as a single number aids simplicity, it does hide a level of detail which we believe would help to improve understanding and monitoring of the long-term funding position of the Fund. This paper seeks to set out this detail.

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

In particular it should be noted that the financial assumptions have been derived as per the Funding Strategy Statement in force as at the 31 March 2019 formal valuation of the Fund. As such, no allowance has been made for RPI reform whereby it is expected that RPI will align with CPIH from 2030 onwards. As part of the 2022 valuation, the Fund will need to consider how this announcement is reflected in the assumption made for long term CPI inflation expectations (to which the majority of benefits are linked).

Executive summary

Since the 2019 valuation, as at 31 March 2021:

- **Past service funding position**: The past service funding shortfall has decreased from £537m to £15m. This notional funding position is based on the Fund targeting annual future investment returns which have a 80% likelihood of being achieved. The reduction in shortfall has been largely driven by strong investment performance since 31 March 2019.
- **Full funded required rate of return**: The future investment return required to be notionally fully funded has fallen from 4.5% p.a. to 3.8% p.a. The likelihood of the Fund’s assets achieving this required level of return has increased from 70% to 80%.
- **Future outlook**: The long term outlook for future investment returns is broadly the same as the last formal valuation. At 31 March 2021, we estimate that the Fund’s asset allocation has a 80% likelihood of achieving an annual return of at least 3.8% p.a. (at 31 March 2019, the equivalent return was also 3.8% p.a.).
- **Future service cost:** The cost of future benefit accrual has increased. At the 2019 valuation the whole Fund Primary Rate of 20.4% of pay had a 78% likelihood of being sufficient to meet the cost of future benefit accrual. At 31 March 2021 there is now a 70% likelihood that 20.4% of pay will be sufficient to meet these future costs.

A summary of these results is included within the Appendix

Liabilities

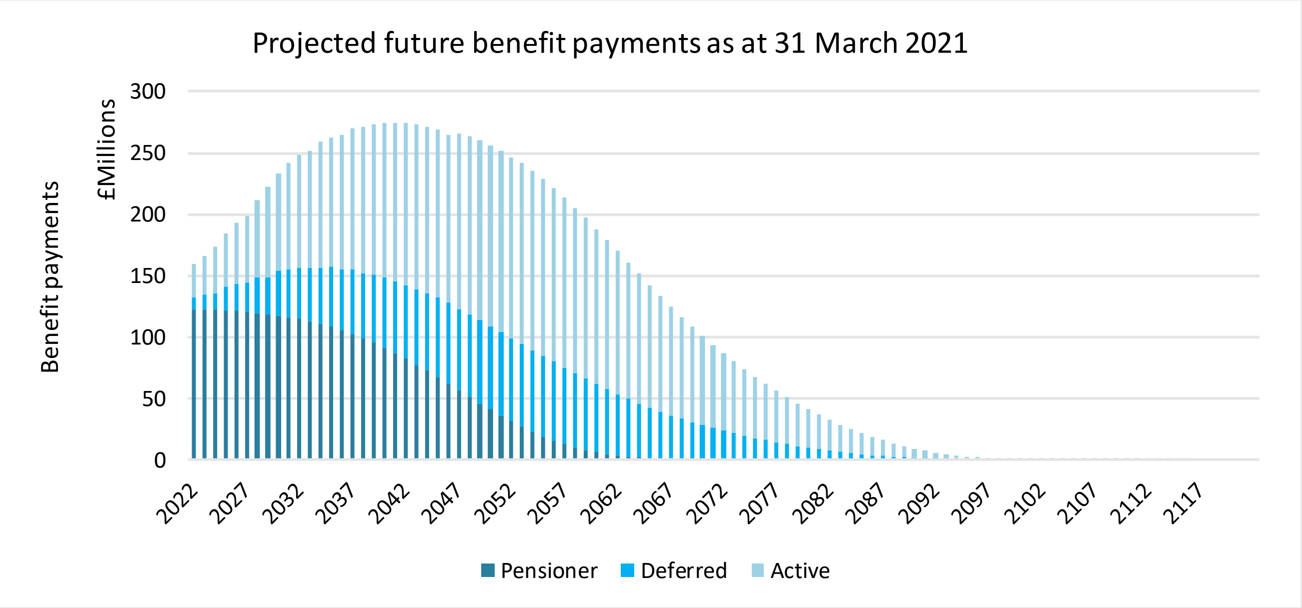
The Fund's liabilities are the future benefit payments due to members in respect of their service accrued in the Fund. Future benefit payments will be in respect of both service accrued up to today ("past service") and service that will be accrued in the future ("future service"). The funding level traditionally presented is only in respect of past service benefits.

To better understand the Fund's past service liabilities, we have detailed below in Chart 1 the projected annual future benefit payments due to all members in respect of service earned up to 31 March 2021:

- Pensioners: those members currently in receipt of their benefits
- Deferreds: those members who have left the Fund but are yet to retire
- Actives: those members who are still participating in the Fund and accruing service

The member group classification is based on each individual member's status as at the last formal valuation (31 March 2019) and the figures are in nominal terms.

Chart 1



Important points to note from the chart are:

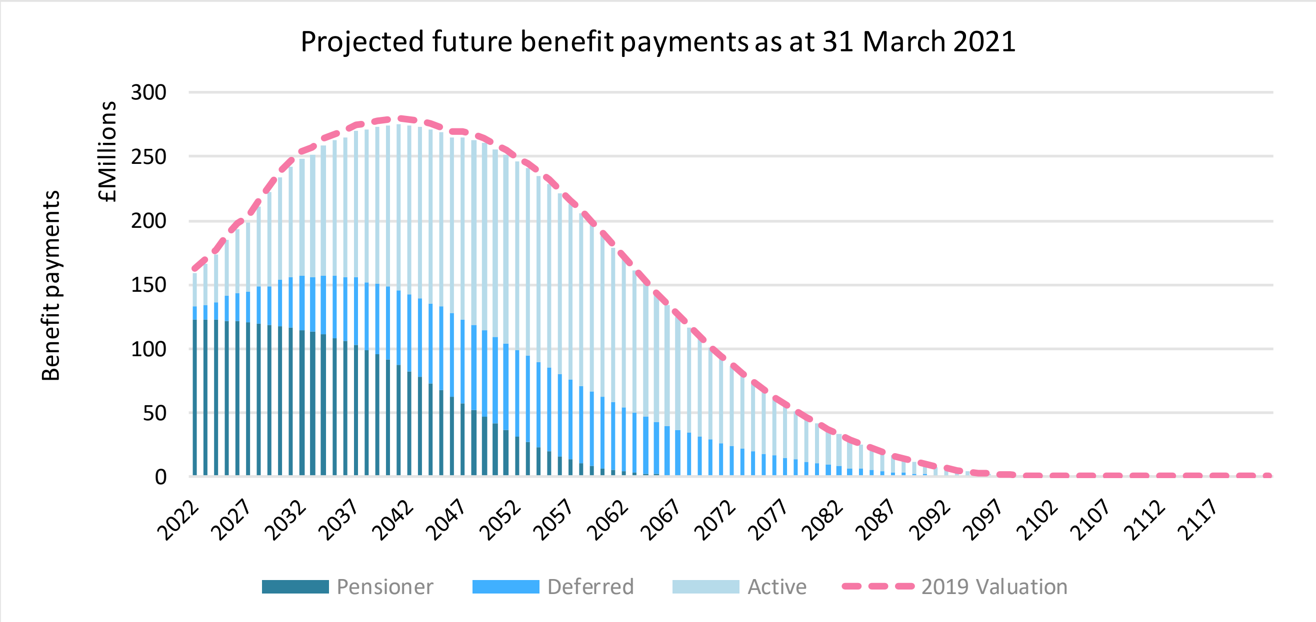
- Currently, the majority of benefit payments are in respect of pensioner members. However, some benefits are expected to also be paid to members who were deferred and active at the last formal valuation and have since retired or some other benefit crystallisation event has taken place e.g. death-in-service.
- Over time, the benefit payments will transition from being mostly in respect of pensioners to members who are currently deferred and active (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.

Change since 2019 valuation

The projected benefit payments are based on the membership data and the financial and demographic assumptions used for the 2019 formal valuation and in line with the Funding Strategy Statement (FSS) dated March 2020. However, they have been updated to reflect actual pension increases since the valuation and changes in future long-term inflation expectations derived consistently with the approach in the current FSS. 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) and market derived long-term inflation expectations have broadly stayed the same since 31 March 2019 **(noting that no allowance has been made for any changes resulting from RPI reform).**

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). The impact of updating for actual pension increases and changes in future inflation expectations since the 2019 valuation has resulted in a minor reduction in the projected benefit payments as at 31 March 2021.

Chart 2



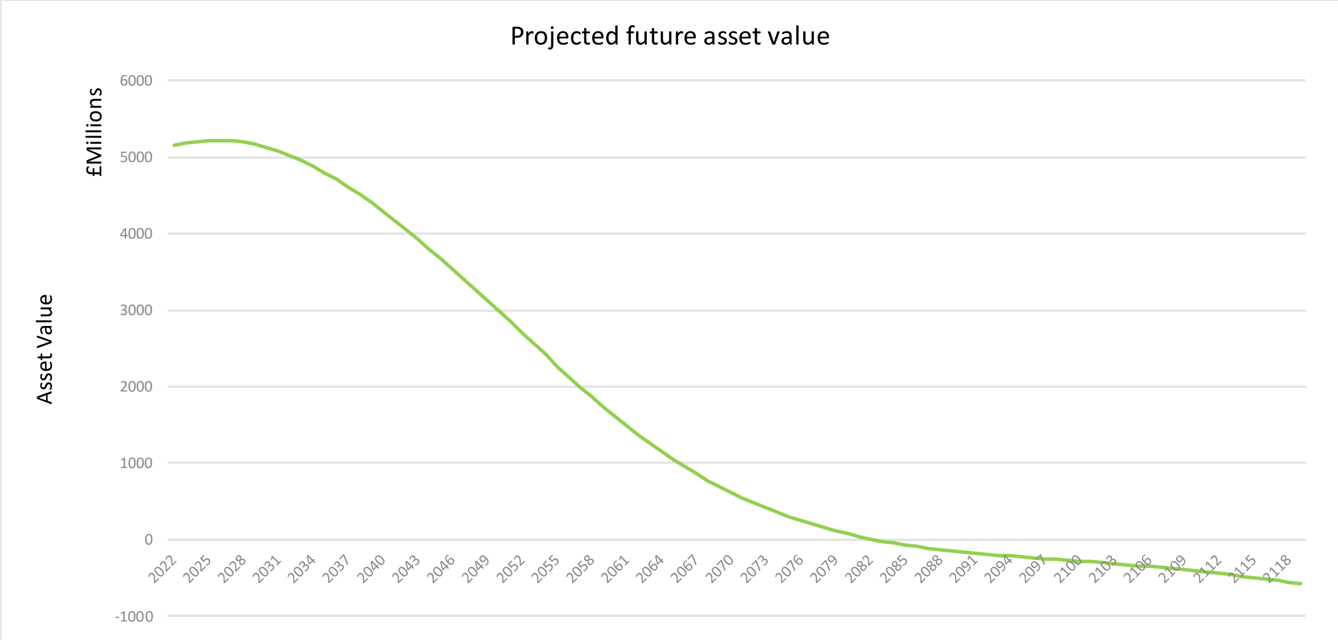
Assets

As at 31 March 2021, the Fund's assets are valued at £5,130m, as provided by Fund officers. The Fund's assets are there to pay all the member benefits accrued to date. We can understand if the current value of assets is sufficient to pay the past service benefits by projecting these values forward over time and allowing for future investment returns and benefit payments. The benefit payments are assumed to match those shown in Chart 2.

At 31 March 2021, we estimate that the Fund's asset allocation has a 80% likelihood of achieving an annual return of at least 3.8% p.a. (at 31 March 2019, the equivalent return was also 3.8% p.a.). **Therefore, the outlook for future investment returns remains broadly the same as the last formal valuation.**

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

Chart 3

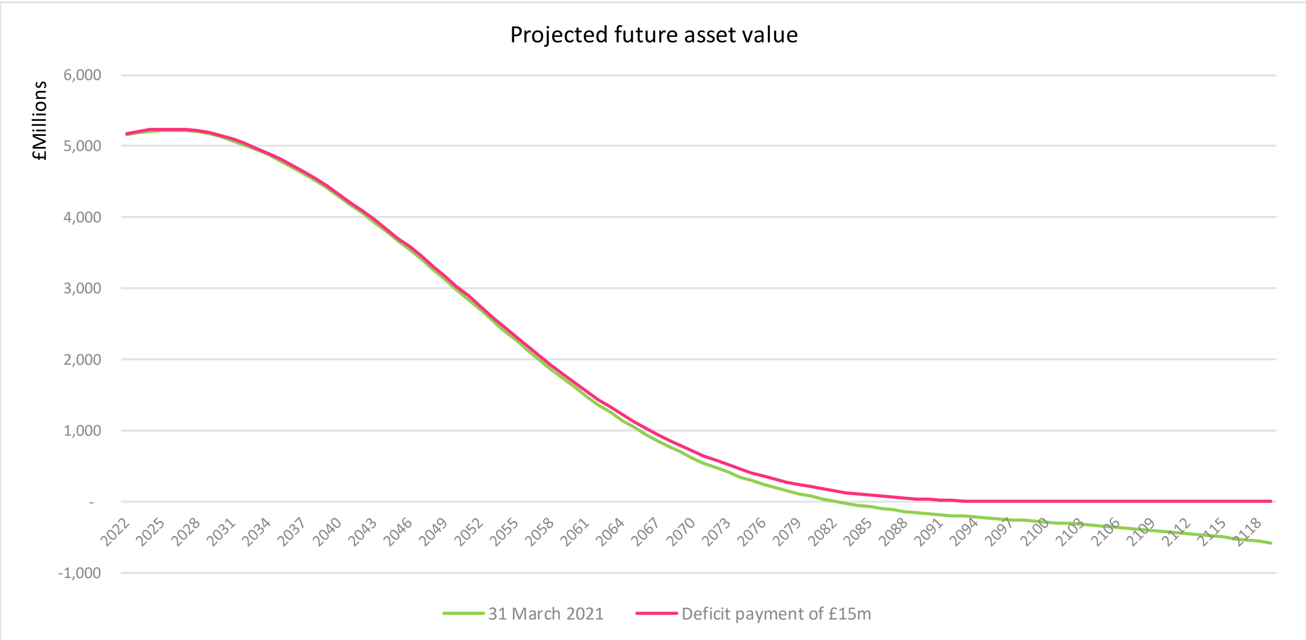


Important points to note from this chart:

- It is estimated that the Fund's assets will be broadly sufficient in paying all future benefit payments due.
- In order to meet all future benefit payments that have been accrued to date, the Fund currently requires an additional £15m of assets as at 31 March 2021. Relative to the Fund's size, this small notional deficit can be considered as not material for the purposes of these projections.

Therefore, in broad terms, at 31 March 2021 **the Fund is currently holding sufficient assets to fully fund all benefits earned to date if investment returns are assumed to be at least 3.8% p.a**. (of which there is an 80% likelihood of achieving these annual returns).

For completeness, **Chart 4** below details the projected Fund asset value with a £15m increase in the 31 March 2021 asset value.



Change since 2019 valuation

It is difficult to make a direct comparison of the actual asset value projections at different dates as there are many factors which will affect the projection. Instead, it is more helpful for comparison purposes to consider and compare the level of cash injection or required return between dates.

At the 31 March 2019 valuation, the Fund's assets were insufficient to pay all future benefit payments based on an assumed investment return of 3.8% p.a.. To have sufficient monies, it was estimated that the Fund would need either:

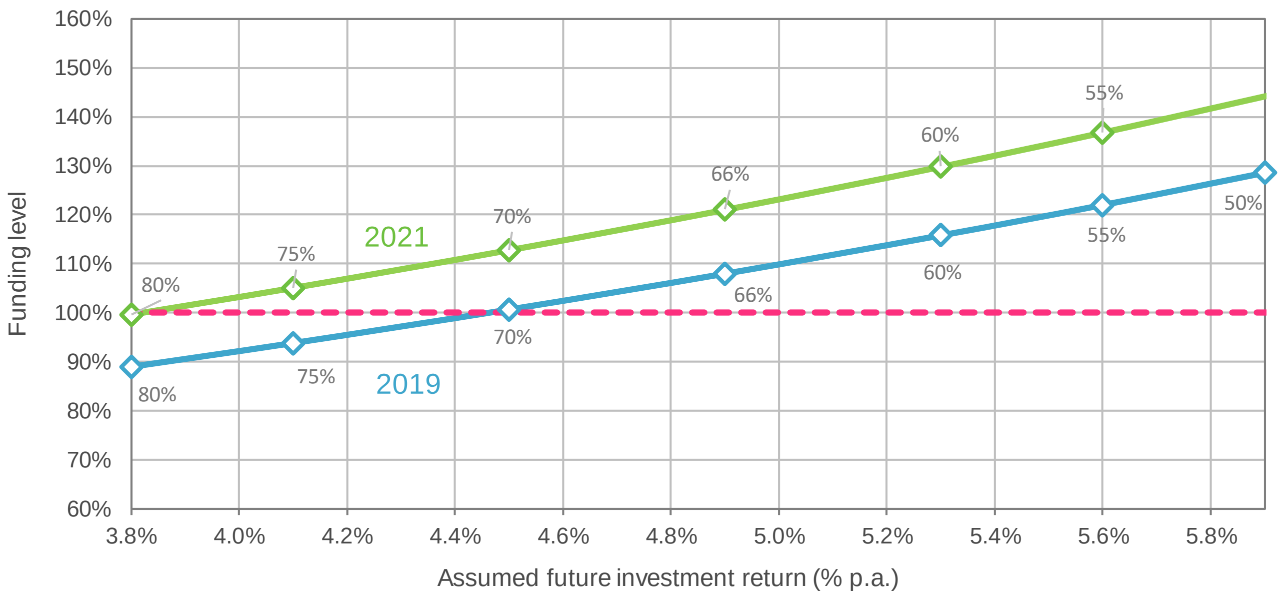
- an additional £537m of assets as at 31 March 2019; or
- future investment returns of at least 4.5% p.a. (which were estimated to be achievable in c.70% of future outcomes).

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

- the past service funding shortfall has decreased from £537m to £15m; and
- the required investment return to be fully funded has fallen from 4.5% p.a. to 3.8% p.a. The likelihood of the Fund's assets achieving the required level of return has increased from 70% to 80%.

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

Chart 5 below 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.



From this chart, we can see that regardless of the investment return assumption used, there has been an 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.

The likelihood of the Fund's assets achieving a given level of future investment return is broadly unchanged, e.g. the likelihood of achieving 3.8% p.a. remains at 80%.

Impact on Secondary Rate Contributions

At the last valuation, to have sufficient assets to pay all accrued benefits at 31 March 2019, the Fund needed to achieve returns of 4.5% p.a. (which there was a 70% likelihood of being achieved) **or** increase its assets by £537m (if the Fund targeted returns which have an 80% likelihood of being achieved).

In reality Funds do not pay large cash injections to maintain funding. Instead, Secondary Rate contributions are paid by employers to target a funding position over an agreed time horizon (as detailed in the Fund's FSS). Employers have their own funding plans within the Fund with varying funding positions and time horizons.

At 31 March 2021, the Fund is now notionally fully funded. Therefore, it can be inferred that the improved past service funding position is likely to have a positive impact on Secondary Rate contributions at the next valuation for the average employer, all else being equal.

Future service considerations (Primary Rate Contributions)

As discussed above, the past service funding position has improved. However, being 100% funded in a scheme like the LGPS which is both open to future accrual and new entrants, is not the endgame. 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. This will include benefits earned by existing members (new accrual) and benefits earned by new members who begin service in the LGPS after the valuation date (new joiners). The assets held today only cover past service benefits – we still need to fund those benefits yet to be earned.

So far, this paper has only considered past service benefits. Similar analysis and projections in respect of future benefit accrual could also be prepared, however, because the LGPS continues to be open to accrual and new joiners, there would be no end date for the projections. Therefore, such projections would be limited in their usefulness.

Instead, it is helpful to consider the long-term cost of future benefit accrual and how that compares to both the long-term cost as at the last formal valuation and the Primary Rate in payment by employers. The Primary Rate is defined as the actuarial cost of new benefits being earned by active members expressed as a percentage of pensionable pay.

Currently, the Fund level Primary Rate in payment is 20.4% of pay (including expenses of 0.3% of pay). At the 2019 valuation, there was a 78% likelihood that this rate would be sufficient to fund the long-term cost of accrual. As at 31 March 2021, we estimate that there is 70% likelihood that 20.4% of pay will be sufficient to fund the long-term cost of accrual i.e. **the cost of future benefit accrual has increased.**

COVID-19

The COVID-19 pandemic has severely disrupted investment markets. At the beginning on the pandemic (in early 2020), the expected future investment return on the Fund's assets had worsened (relative to the 2019 valuation). However as noted in chart 5, this position has now recovered and future returns are currently expected to be broadly in line with the 2019 valuation expectations.

We would be happy to provide further updates in the future to monitor the ongoing position of the Fund as the pandemic, macroeconomic environment and the efficacy of vaccination programmes continue to affect the future outlook for both investment returns and inflation.

Our funding projections make no allowance for actual membership experience or updates to longevity assumptions as a result of the pandemic or otherwise.

Interaction with investment strategy

The results in this paper focus on the Fund's funding strategy which is required to include a margin of prudence to ensure security of member benefits. The funding strategy is largely focussed on two indicators for expected future investment returns:

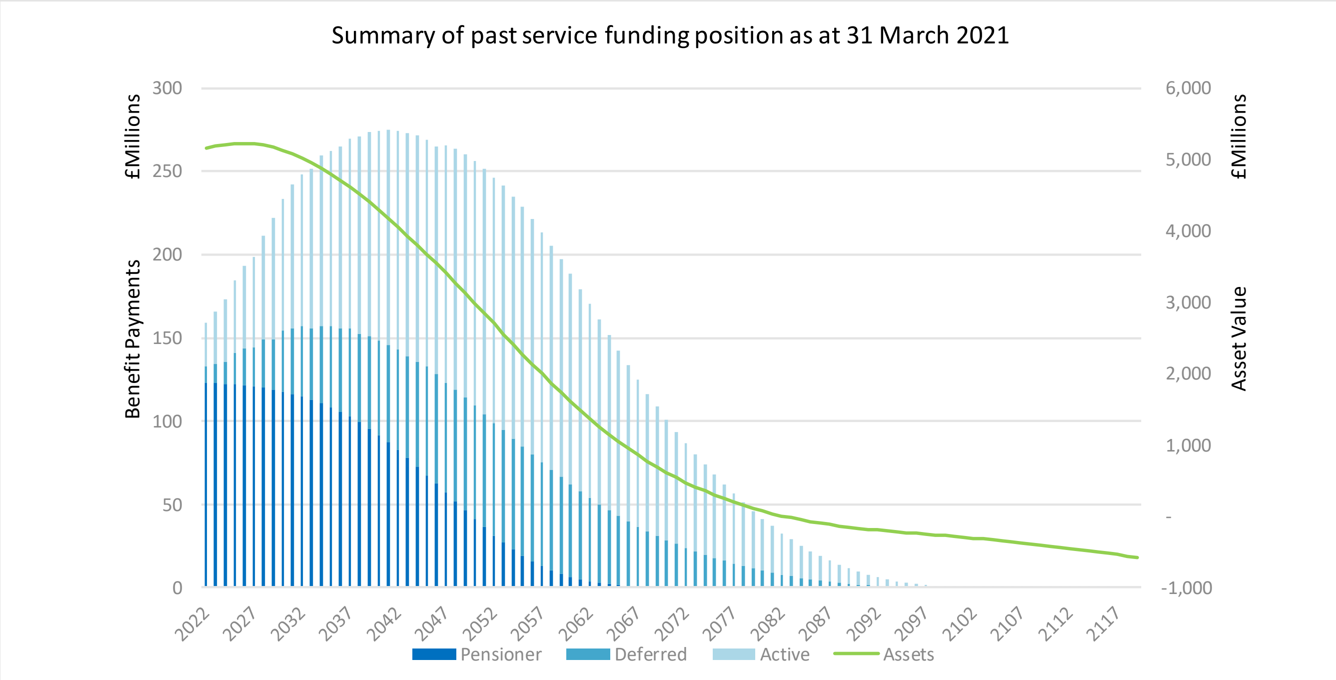
- **Expected future returns at 80% likelihood** of being achieved - in line with the Fund's current funding strategy (i.e. 80% is being targeted to provide the required margin of prudence). As described above, the Fund expects future investment returns to be at least 3.8% p.a. with an 80% likelihood of being achieved.
- **Required rate of return to be fully funded**, i.e. what investment returns would be needed for the current assets to be sufficient to fund all past service benefits. As described above, the Fund requires future investment returns to be at least 3.8% p.a. (which has an 80% likelihood of being achieved) to be fully funded.

In reality, the Fund's assets are expected (on average) to deliver returns which are more in line with 'best estimate' returns. The funding strategy aims for lower returns to safeguard against various risks (including investment risk). However, the investment strategy will typically seek to achieve the highest possible returns for the given strategic allocation. Therefore, we appreciate that our investment colleagues will often make reference to and benchmark against 'best estimate' returns (i.e. a 50% likelihood of being achieved). Note, the 'best estimate' return at 31 March 2021 is 6.0% p.a. (compared to 5.9% at the 2019 valuation).

Summary

The following chart combines the liability and asset sides of the funding balance sheet to provide an overall view of the past service funding position.

Chart 6



As at 31 March 2021, the **past service** funding position has improved primarily due to the Fund's investment outperformance since 31 March 2019.

However, the **future service** position has deteriorated. While future long-term investment return expectations remain broadly the same as at the 2019 valuation, future market conditions for valuing benefit costs are expected to be more challenging and are applying upward pressure to the future service cost (compared to March 2019).

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

However, there are many moving parts and as such the following caveats apply:

- the funding position and cost of future benefit accrual may change when an allowance is made for RPI reform and the resulting impact on future inflation expectations;
- the impact on the rates of different employers will vary depending on their membership profile;
- the various judgements relating to McCloud and Goodwin will impact employers differently (the above analysis doesn't make any allowance for these matters); and
- any change to market conditions and the outlook for future returns will impact contributions requirements.

Next steps

The paper has been provided for information purposes only to help understand how the funding position has changed since the last formal valuation when the current funding strategy was agreed. The Fund may use the results of this paper to act as an insight for considering whether any sources of risk need to be discussed or further investigated, or to trigger a review of the current and future long-term funding and investment strategy.

However, it must be noted that this paper has been provided for information purposes and 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 Leicestershire County Council as Administering Authority of the Leicestershire County Council 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:-

Richard Warden FFA

Tom Hoare FFA

21 June 2021

For and on behalf of Hymans Robertson LLP

Appendix

Summary of results

	31 March 2019	31 March 2021
Assumed future investment return (based on a 80% likelihood of success)	3.8% p.a.	3.8% p.a.
Salary increase assumption	2.8% p.a.	2.8% p.a.
Pension increase assumption	2.3% p.a.	2.3% p.a.
Assets	£4,312m	£5,130m
Past service liabilities	£4,849m	£5,145m
Surplus/(Deficit)	**£537m**	**£15m**
Funding level	**89%**	**100%**
Future investment return required to be 100% funded	4.5% p.a.	3.8% p.a.
Likelihood of achieving this return	70%	80%
Likelihood of Primary Rate of 20.4% of pay meeting the cost of future benefit accrual	78%	70%

Sensitivity of results

The results are sensitive to market conditions, in particular the future investment return assumption and future inflation. The approximate impact of a 0.1% change in either assumption (i.e. lower investment returns or higher inflation) is noted below.

0.1% change in future investment return (or inflation) assumption	
Increase in liabilities (%)	2%
Impact on funding position (£m)	£100m

The results are also dependent on a number of other factors including the membership details and demographic trends such as longevity. Changes in each of these factors can have a material impact on the results. If further information about the sensitivity of the results to different data or assumptions is required, this can be provided on request.

GAD Section 13

The Government's Actuary's Department (GAD) carried out benchmarking analysis across all LGPS funds at the 2019 valuation. This report reviewed several funding risk indicators to draw comparison between funds and to raise concerns with any funds that failed on any given metric. GAD's raised no concerns on the Fund's funding position and funding policies in their review.

On GAD's standardised funding basis, the Fund was c103% funded at the 2019 valuation - noting an increase from the 89% reported by the Fund in the Fund's 2019 valuation report under the assumptions described within this paper. It is worth noting that GAD's assumptions are only suitable for comparison between funds and each fund has discretion to set their own funding plans. The results contained within this paper have no direct correlation with the GAD funding basis. However, as the improvement in past service funding has been driven by better than expected investment returns it is reasonable to expect the GAD funding basis would also show an improvement of a similar magnitude, all else being equal. Note, GAD do not carry out any analysis of funds in the period between triennial valuations.

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.

The asset value at 31 March 2021 was provided by Fund officers.

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 2.8% 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									
		Cash	Index Linked Gilts (medium)	Fixed Interest Gilts (medium)	UK Equity	Overseas Equity	Property	CorpMedium A	Inflation	17 year real yield	17 year yield
5 years	16th %'ile	-0.3%	-2.7%	-2.5%	-3.9%	-3.6%	-3.5%	-2.9%	1.8%	-2.6%	0.8%
	50th %'ile	0.4%	0.2%	0.1%	4.3%	4.3%	2.5%	0.1%	3.4%	-1.7%	1.9%
	84th %'ile	1.2%	3.2%	2.6%	12.3%	12.3%	8.8%	2.8%	4.9%	-0.8%	3.1%
10 years	16th %'ile	0.0%	-1.9%	-1.1%	-0.9%	-1.0%	-1.3%	-1.1%	1.8%	-2.2%	1.1%
	50th %'ile	1.0%	0.1%	0.3%	4.8%	5.0%	3.2%	0.6%	3.5%	-1.0%	2.4%
	84th %'ile	2.2%	2.3%	1.6%	10.7%	10.8%	8.0%	2.1%	5.1%	0.3%	4.1%
20 years	16th %'ile	0.6%	-1.2%	0.2%	1.3%	1.4%	0.8%	0.5%	1.7%	-1.6%	1.3%
	50th %'ile	2.0%	0.5%	1.0%	5.8%	5.8%	4.2%	1.6%	3.2%	0.1%	3.3%
	84th %'ile	3.6%	2.2%	1.7%	10.3%	10.3%	8.0%	2.5%	4.9%	1.9%	5.7%
	Volatility (Disp) (1 yr)	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

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	7.0%
Overseas equities	37.0%
Private Equity	5.0%
Infrastructure Equity	10.0%
Diversified growth	7.5%
Property	10.0%
Index linked gilts (medium)	5.0%
Corporate Bonds	3.0%
Emerging market debt	2.5%
Multi asset credit	4.0%
Private Lending	9.0%
Total	**100%**

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.

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.