

South Yorkshire Pension Fund

2022 valuation: national picture

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Executive summary

National picture

- The overall funding level for the LGPS in England & Wales at 31 March 2022 was 107%. This is an increase from the 2019 valuation funding level of 98%.
- The increase in funding level was primarily driven by better than expected investment returns.
- The average employer contributions for the LGPS in England & Wales has fallen to 20.8% of pay (from 22.0% at the 2019 valuation).
- The reason for this fall is a reduction in secondary contributions (due to the increase in funding level) more than offsetting increases in the primary rate (due to increasing future inflation expectations).
- Based on current investment strategies and a contribution rate of 20.8% of pay, there is a 77% likelihood that the LGPS in England & Wales will have sufficient monies to pay benefits in the long-term. This is a high likelihood given the uncertainty associated with funding an open, long-term defined benefit pension scheme such as the LGPS.

South Yorkshire Pension Fund

- The Fund's 2022 valuation funding level was 119%. This ranks 11th out of the 86 funds analysed. On the Scheme Advisory Board like-for-like funding basis, the Fund is ranked 23rd out of 86.
- The likelihood of the Fund's investment strategy achieving the level of assumed return underlying the 2022 funding level is 70%. This ranks 52nd out of 86.
- The Fund's average employer contribution rate at 2022 is 18.5% of pay (17.9% of pay at 2019). This is ranked 71st out of 86 funds (i.e. is lower than average).
- Based on the Fund's current investment strategy and contribution rate, there is a 80% likelihood of having sufficient monies to pay benefits in the long-term. This is higher than the national level and shows that the Fund has a robust plan in place.
- This analysis should give the Fund additional comfort that the funding decisions made during the 2022 valuation are appropriate and continue to ensure there is enough money to pay benefits in the long-term.**

Introduction

The South Yorkshire Pension Fund's ('the Fund') 2022 valuation was formally completed in March 2023 with the sign-off of the valuation report¹.

This concluded the 12 month valuation period (longer when planning and preparation is taken into account) where the Fund reviewed their own funding plans and set contribution rates for each individual participating employer. This process is typically internally focussed, reflecting the Fund's views on employer covenant, attitude to risk and preferred approach to funding LGPS benefits.

Now, with the 2022 valuations complete for all 86 LGPS funds in England & Wales, the Fund can understand how their past service funding level and contribution rate compares to the national ('E&W LGPS') aggregate position and its peers. This report sets out this analysis.

Given that the LGPS is a single scheme operated via a local fund structure, comparing and contrasting funding positions between funds can provide a helpful context to the Fund's own results. However, we would caution against solely relying on the analysis to draw conclusions about the appropriateness of the Fund's own funding position and contribution rate. Other factors, such as employer covenant, investment strategy and attitude to risk are important determining funding factors which can vary significantly between LGPS funds due to various local factors.

Recap of 2022 valuation results

The 2022 valuation was positive.

Past service funding level

The past service funding level improved from 99% at 2019 to 119% at 2022. This was primarily due to strong investment returns over the inter-valuation period.

Average employer contribution rate

The average employer contribution rate increased from 17.9% of pay at 2019 to 18.5% of pay at 2022. This was largely driven by the rise in inflation expectations increasing the contributions required to cover the cost of future benefit accrual (ie increased primary contribution rates).

Table 1: Summary of Fund's 2022 and 2019 valuation results

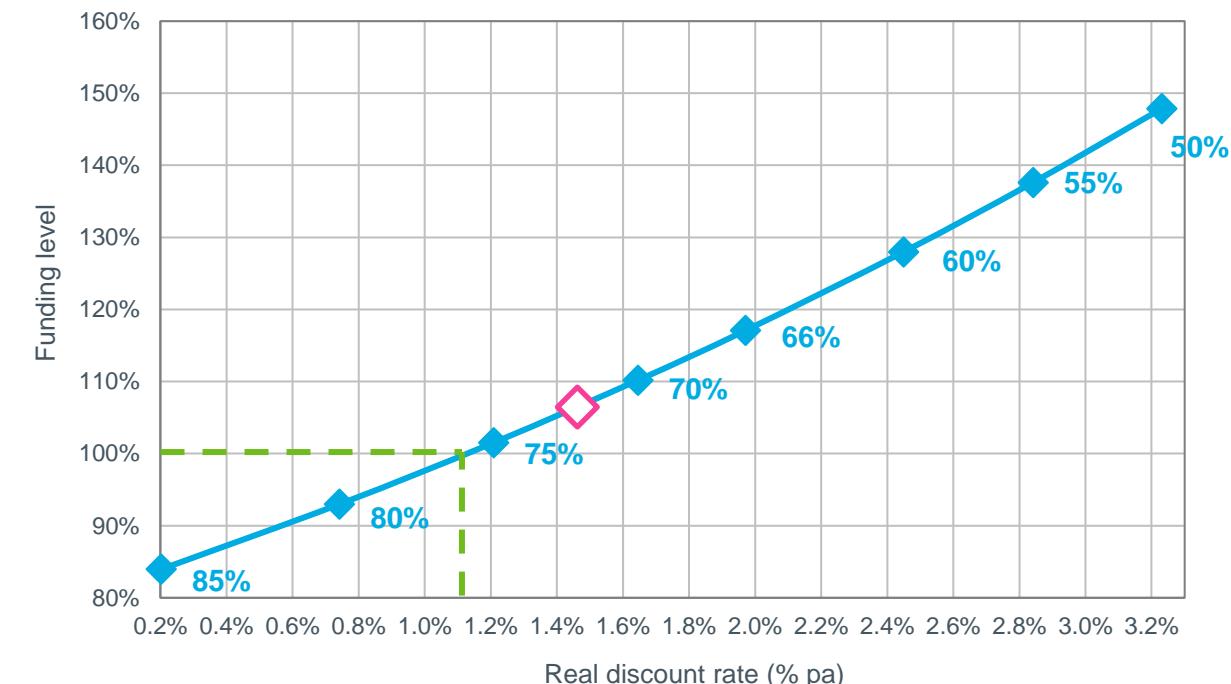
	2022	2019
Funding level	119% Surplus of £1,685m	99% Deficit of £63m
Contribution rate		
- Primary rate	20.3% of pay	16.1% of pay
- Secondary rate	-1.8% of pay	1.8% of pay
- Total rate	18.5% of pay	17.9% of pay

Funding level

National past service funding level

- Each LGPS fund must report a past service funding level (ratio of assets against liabilities). The funding level for the E&W LGPS at 31 March 2022 is 107%. At 2019 it was 98%.
- The increase in funding level is mainly due to strong investment returns between 2019 and 2022. The value of assets in E&W LGPS increased by around 27% over this period.
- A single funding level is an easy-to-understand metric, but it hides a lot of important detail. The value of the liabilities is dependent on assumed future investment returns (the discount rate). Therefore, we've calculated the liabilities and funding level for the LGPS across a range of different real discount rates¹ on **Chart 1**.
- To help better understand funding risk, the likelihood of the E&W LGPS's aggregated investments achieving each level of return has also been calculated (the numbers next to each blue diamond).
- The pink diamond shows the E&W LGPS funding level of 107%. This is based on a real discount rate of around 1.5% pa. The chart also shows that at 31 March 2022, the required real return for the LGPS to be 100% funded was only 1.1% pa (green dotted line). We estimate a c. 76% likelihood of the LGPS being able to deliver that level of real return over the next 20 years – a very high level given the current level of uncertainty in the financial markets

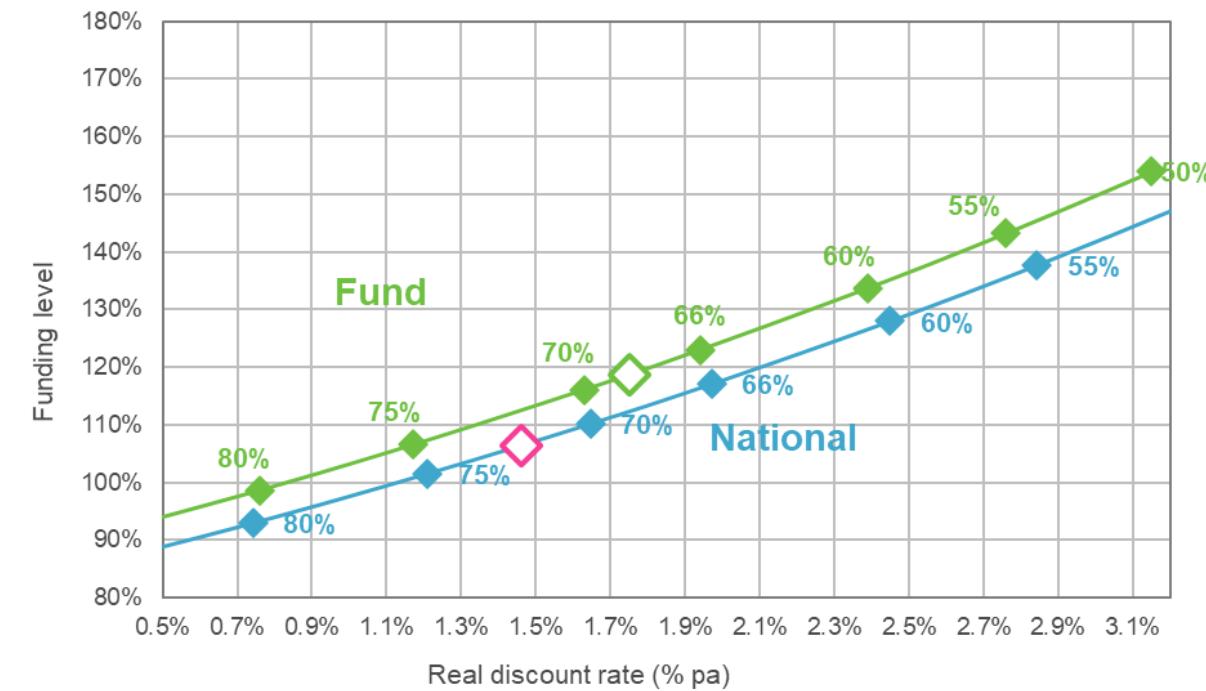
Chart 1: E&W LGPS funding level at 31 March 2022 across a range of real discount rates



Comparison to the national funding level

- The Fund's funding level at 31 March 2022 was 119%. This improvement was mainly driven by 27% growth in assets over the period.
- Chart 2** shows how the Fund's own funding past service funding position compares against the national position.
- The past service funding position of the South Yorkshire Pension Fund is stronger than the national position.
- The real return required for the South Yorkshire Pension Fund to be 100% funded is c.0.8% pa. The likelihood of the Fund's asset yielding at least this return is around 80%.
- This compares to the real return required by the national position of c.1.1% pa which has a likelihood of c.76%.
- Based on the Fund's current investment strategy, the South Yorkshire Pension Fund is therefore requires a lower level of future investment returns than the national position to remain fully funded.
- The South Yorkshire Pension Fund is therefore in a stronger position than the national E&W LGPS position and shows the Fund has robust funding plans in place.

Chart 2: E&W LGPS and Fund's funding levels across a range of real discount rates

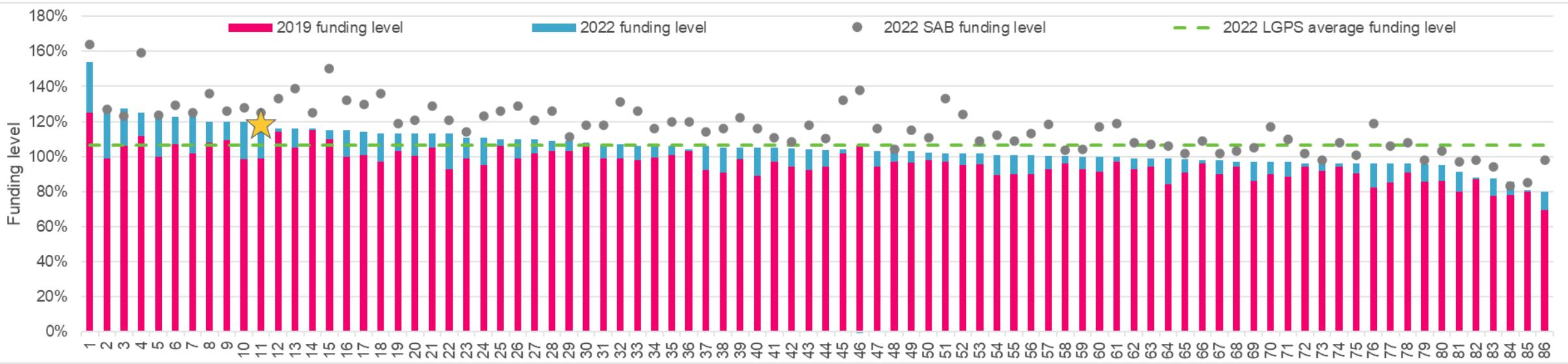


Comparison to other LGPS funds' funding levels

- **Chart 3** shows the reported funding level for each LGPS fund at both the 2022 and 2019 valuations. The Fund's reported funding level is in the first quartile and is highlighted by the star in the chart.
- A general trend observed at the 2022 valuation was that funds who were better funded in 2019 saw bigger improvements in their funding level at 2022. This is because those funds held more assets (compared to the liabilities) at 2019 so they benefitted more from the strong investment performance.

- LGPS funding levels have always varied by individual fund and are sometimes used to compare the relative funding strength of individual funds. But it's clouded by differences such as different underlying assumptions.
- To aid comparison, funds also calculate a funding level using a set of prescribed assumptions set by the LGPS Scheme Advisory Board (SAB). The 'SAB funding level' is also shown on **Chart 3**.
- Further discussion on the comparison to other funds is on the next page.

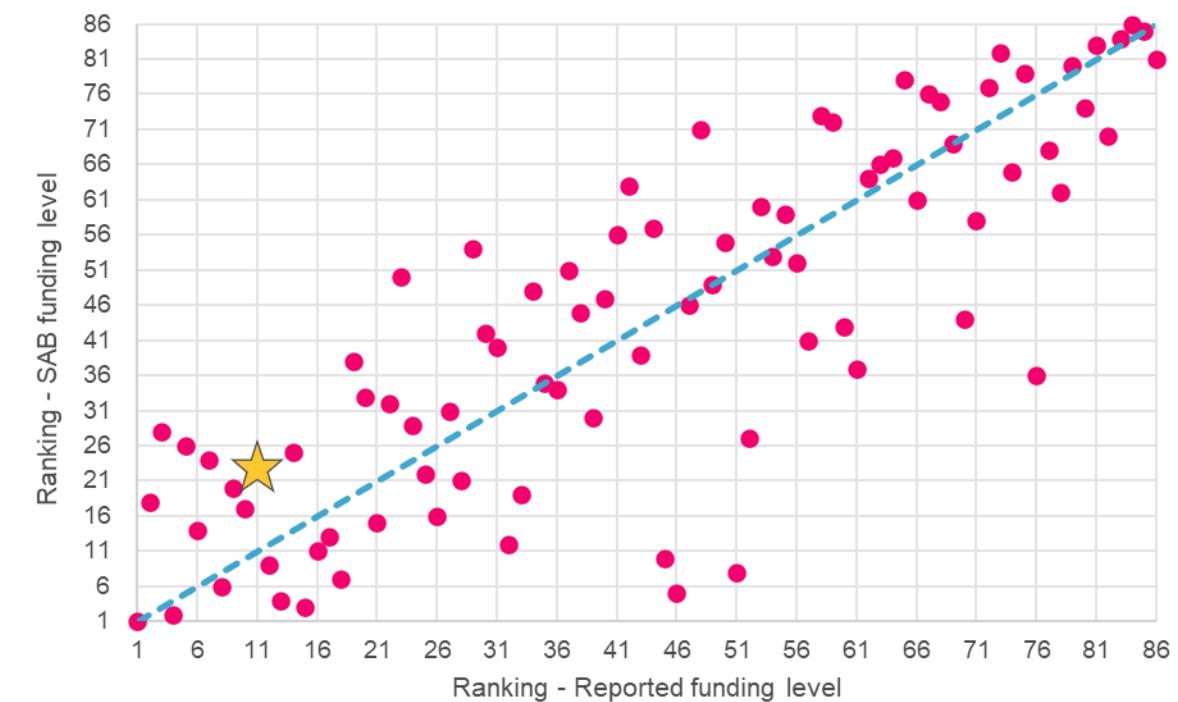
Chart 3: Distribution of reported funding levels across individual LGPS funds



Commentary on comparison to other LGPS funds

- Whilst **Chart 3** on the previous page is ordered by reported funding level, no similar order or progression exists for the SAB funding level.
- This is even more apparent on **Chart 4** on this page which shows the ranking for each fund on their reported funding level and SAB funding level. The Fund is shown by the star.
- Funds below the blue dotted line are those which appear to move up the rankings when the funds are compared on consistent assumptions. It's tempting to conclude that the funds below the dotted line are therefore more prudent than those above the dotted line.
- However, this analysis does not factor in that investment strategy is a significant factor. And in recent years, there has been increasing divergence in investment strategy between funds.
- For example, one fund ('A') may use a very low discount rate (expected future return on investments) when calculating the funding level, which looks more prudent than another fund ('B') using a higher rate. However, if fund A has a more defensive investment strategy than B, then the likelihood of fund A achieving its lower discount rate may actually be similar to the likelihood of fund B achieving its higher rate from its more growth-oriented strategy.
- By combining funding level, discount rate and investment strategy we can make a more robust comparison of funding (solvency) position between funds. This analysis is set out on the next page.

Chart 4: Ranking on reported and SAB funding levels (1 = highest, 86 = lowest)

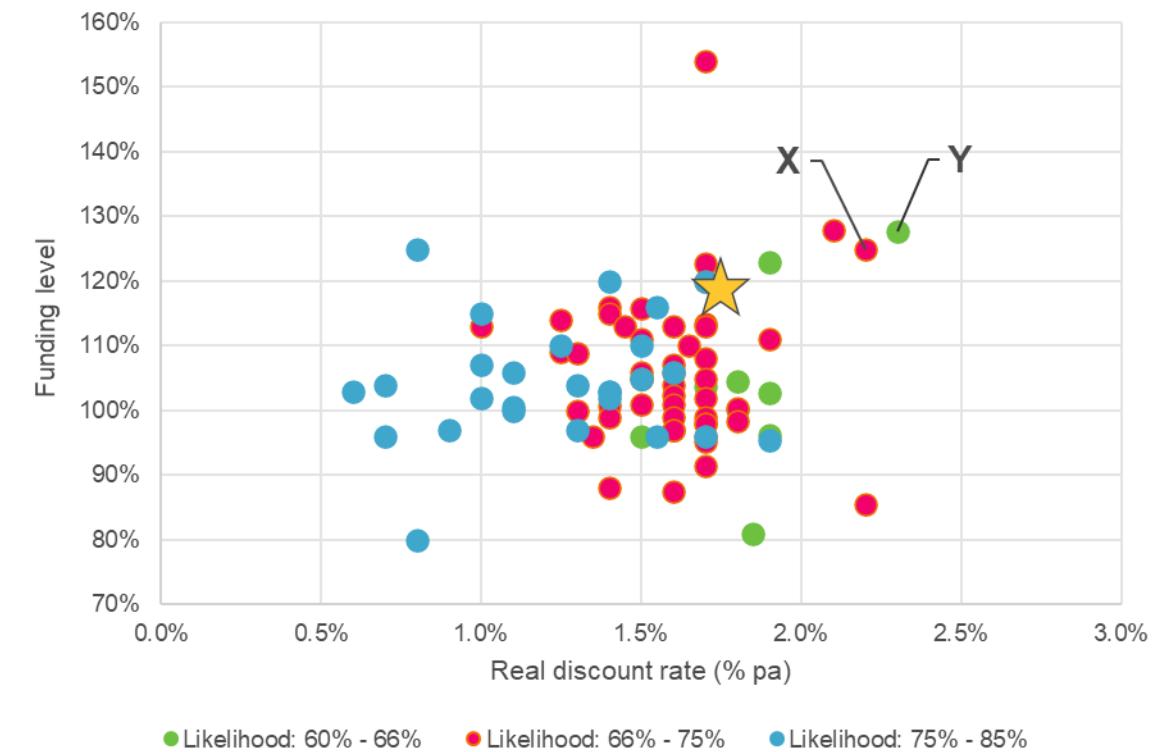


Fund's ranking: Reported = 11th SAB = 23rd

In-depth comparison of funding position

- For each LGPS fund, we have estimated the likelihood of their investment strategy achieving the assumed real discount rate used to calculate the reported funding level at the 2022 valuation.
- Chart 5** shows the reported funding level, the real discount rate the funding level is based on and the calculated likelihood.
- This gives users more information to understand, compare and contrast past service funding positions. For example, looking at funds X and Y on the chart, they have broadly the same funding level and same future assumed real return. A natural conclusion would be that they're similarly funded. However, looking at the colours, we can see that fund X has a higher likelihood of achieving the future assumed real return compared to fund Y. So in fact, fund X is probably in a stronger overall funding position.
- The Fund is represented on the chart with a star. We estimate that there is a 70% likelihood of achieving the real discount rate underlying the reported funding level. This is 52nd highest likelihood out of the 86 funds included in our analysis.
- Despite the Fund having a lower likelihood of assumed real return than average, the funding level of the Fund is higher than the majority of LGPS Funds, suggesting the Fund is in a strong position.

Chart 5: Funding level, real discount rate and likelihood of investment strategy achieving return



Contribution rates

Comparison to the national level

- The LGPS continues to offer future accrual of benefit to existing and new members. Given the ‘open’ status of the scheme, the main focus of a valuation is on the cost of providing the benefits, with any variation falling to employers.
- When setting contribution rates, LGPS administering authorities are seeking a balance between security (ensuring there will be enough money in the future to pay benefits), affordability (for the employer) and stability (avoiding significant changes, particularly increases). All three objectives conflict with each other so it’s a difficult balancing act.
- The general contribution rate themes at the 2022 valuation were an increase in primary rates (due to increased inflation expectations) and a reduction in secondary rates (due to improved past service funding levels). **Table 2** sets out the average employer contribution rates for the LGPS.

Table 2: E&W LGPS average employer contribution rates

National level	2022	2019
Primary rate	19.8% of pay	18.6% of pay
Secondary rate	1.0% of pay	3.4% of pay
Total employer rate	20.8% of pay	22.0% of pay

- At the 2022 valuation, the Fund carried out in-depth asset-liability modelling to review contribution rates and engaged with a number of employers to strike an appropriate balance between security, affordability and stability.
- The resulting average employer contribution rate for the Fund is set out below.

Table 3: Fund’s average employer contribution rates

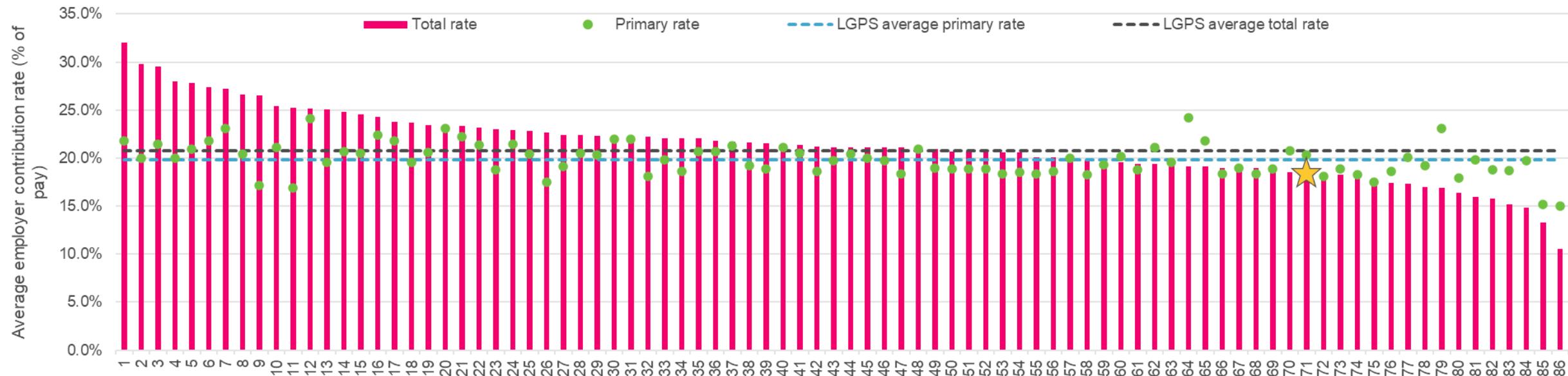
Fund	2022	2019
Primary rate	20.3% of pay	16.1% of pay
Secondary rate	-1.8% of pay	1.8% of pay
Total employer rate	18.5% of pay	17.9% of pay

- The Fund’s primary contribution rates have followed a similar trend to the national average, increasing due to increase inflation expectations.
- Secondary contributions have also decreased since the 2019 valuation due to improved past service funding levels, however this has only partially offset the increase in primary rates.
- Total contribution rates at the 2022 valuation are therefore higher than the 2019 valuation to increase the security of benefits to scheme members.

Comparison to other LGPS funds

- **Chart 6** shows the average employer total and primary contribution rate for each LGPS fund at the 2022.
- The Fund's average contribution rate is ranked 71st out of 86 and is highlighted in the chart by the star.
- There's a wide range of average rates across the funds. The main causes for this variation are local differences in investment strategy, past service funding position and the approach to balancing security, affordability and stability.

Chart 6: Distribution of average employer contribution rate across individual LGPS funds



Note: Individual fund names can be referenced against the key in Appendix 3

Comparison to other LGPS funds

- Historically, when comparing contribution rates between funds (and employers within the same fund), the analysis has focussed on past service funding level vs contribution rate. However, given the LGPS's current strong funding position and increasing divergence in investment strategy, this analysis is too simplistic.
- For example, the primary rate, which makes up most of the employer contribution rate is independent of the past service funding level. Instead, it is linked to a fund's investment strategy as shown on **Chart 7**.
- At 2022, we have also seen a weakening of the correlation between funding level and secondary rate (see **Chart 8**). This is evidence of LGPS funds looking to increase the stability in contribution rates instead of immediately giving full credit for the recent improvements in the past service funding level.
- This analysis, and the position of the Fund in both charts, suggests that the funding plan adopted is appropriate for both the Fund's funding position and investment strategy.
- However, there is further analysis that can be undertaken to draw a firmer conclusion on the robustness and appropriateness of a funding plan. This is detailed on the next page.

Chart 7: Primary rate vs expected (annualised 20 year median) real return from investment strategy

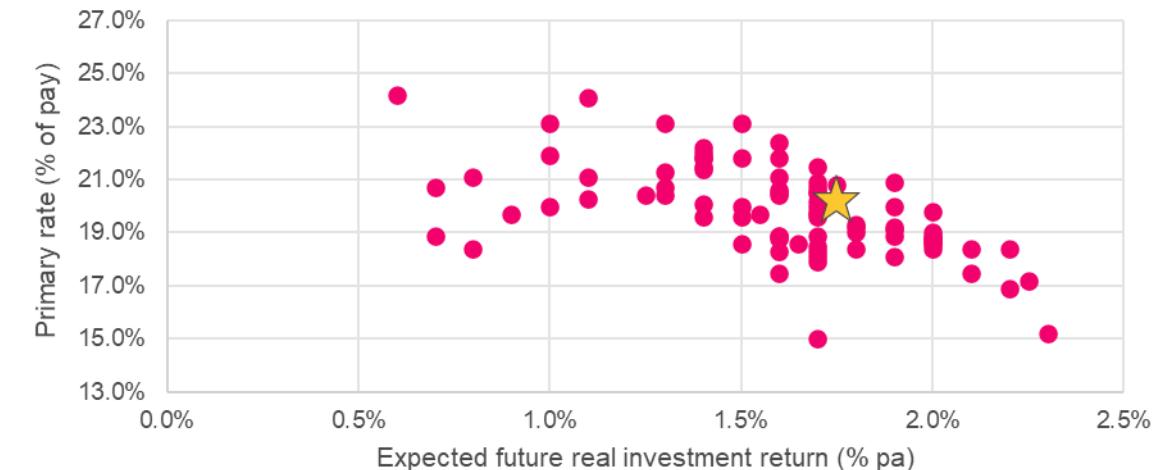
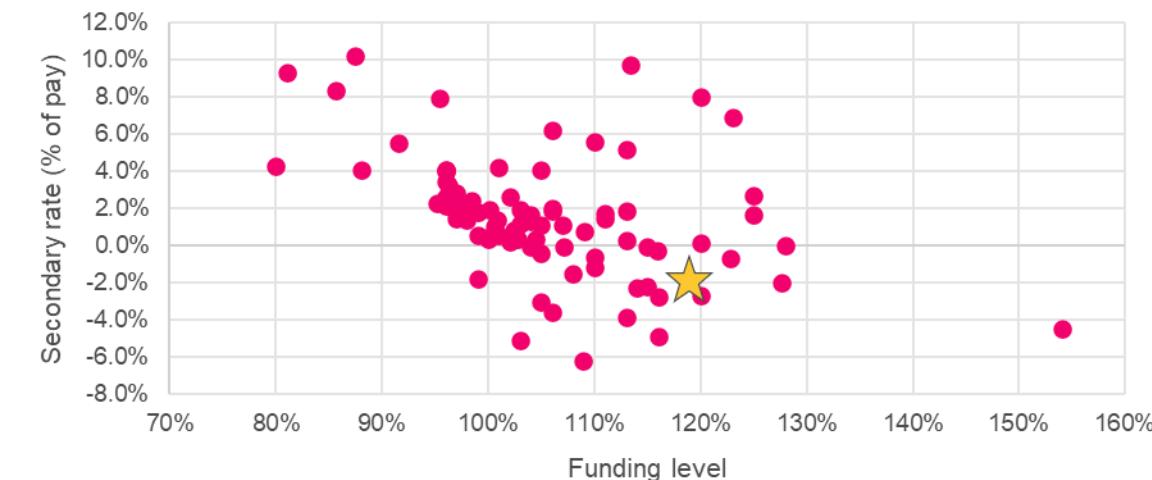


Chart 8: Secondary rate vs funding level



Understanding and comparing funding plan robustness

- When trying to understand the robustness of a funding plan, stakeholders are looking to see ***how likely is it that the combination of the current funding position, contribution rate and investment strategy result in there being enough money to pay benefits in the future?***
- At an E&W LGPS level, we estimate that there is a 77% likelihood of having sufficient money in the future to be able to pay benefits. Given the sources of uncertainty for an open, defined-benefit pension scheme, this is a very strong position.
- For the Fund, the likelihood is 80%. This is higher than the national level and shows that the Fund has a robust plan in place. It also suggests that, compared to peers, contribution rates in the longer term are more likely to fall or have a lower chance of needing to increase in any future adverse scenarios.
- Charts 9 and 10** shows how the likelihood for all LGPS funds varies by both contribution rates and funding level. The lack of correlation shows the importance of not relying solely on either of these two factors when comparing and contrasting funding plan robustness.

Chart 9: Likelihood vs average employer contribution rate



Chart 10: Likelihood vs reported funding level



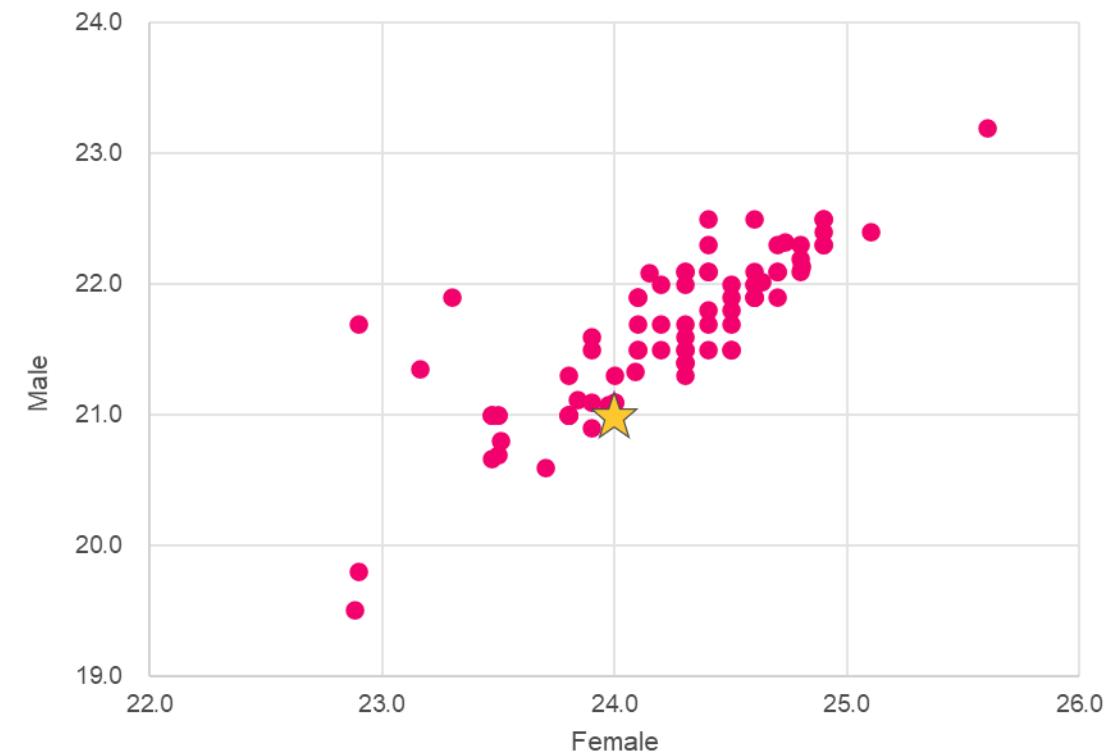
Other areas of interest

Life expectancy

Life expectancy

- Assumed future life expectancy varies between LGPS funds as shown by Chart 11. This difference can be due to a variation in outlook on future life expectancy improvement trends and the profile of each fund's membership.
- The Fund's life expectancy (denoted by the star) is lower than the national average.

Chart 11: Fund-level average assumed life expectancy for a 65 year old at 2022



McCloud and employee contribution rates

McCloud

- At the 2022 valuation, every fund made allowance for the potential impact the McCloud remedy could have on some members' benefits.
- The impact at E&W LGPS level is a 0.5% increase in liabilities. For the Fund the impact is a 0.2% increase. This is less than the national average because the Fund has a lower salary increase assumption than peers.

Employee contribution rate

- The contribution rate analysis in the report focussed on employer costs. However, employees also contribute to their LGPS benefits.
- At the 2022 valuation, the average employee contribution rate at E&W LGPS level is 6.5% of pay (compared to 6.4% at 2019). This increase suggests pay has increased slightly more than inflation between 2019 and 2022.
- The Fund's average employee rate at 2022 is 6.5% of pay (6.4% at 2019). This is similar to the national average suggesting that, overall, the Fund's membership has typical pay. This change is similar to what happened nationally suggesting pay increases have generally mirrored peers.

Conclusions

Conclusions

- At the 2022 valuation, the Fund is in a strong position.
- The past service funding level is strong, with enough money set aside to pay for the benefits earned to date.
- The Fund has been able to, on average, keep contribution rates stable for the majority of employers.
- The funding plan is robust with a likelihood of success of 80%.
- This should give the Fund additional comfort that the funding decisions made over the past year (and longer) are appropriate and continue to ensure there is enough money to pay benefits in the long-term.



Appendices

APPENDIX 1

Reliances and limitations

Reliances and professional standards

- This report has been prepared for South Yorkshire Pensions Authority as Administering Authority of the South Yorkshire Pension Fund ('the Fund') for the purpose of understanding that national funding picture of the LGPS in England & Wales at the 2022 valuation and providing context to the Fund's own position.
- It has not been prepared for any other purpose and should not be so used. The report should not be disclosed to any third party except as required by law or regulatory obligations or with our prior written consent.
- We accept no liability where the report is used by or disclosed to a third party unless we have expressly accepted such liability in writing. Where this is permitted, the report may only be released or otherwise disclosed in a complete form which fully discloses our report and the basis on which it is given.
- Technical Actuarial Standards apply to this report and have been complied with where material and to a proportionate degree.

Limitations

- The sources of information used in this report are obtained from publicly available documents, specifically the Dashboard contained in each individual LGPS fund's 2022 valuation report and the investment strategy also set out in that report. If no investment strategy is contained in the report, then we have used the strategy set out in the latest available public version of a fund's Investment Strategy Statement.
- The results in this report may be different if more detailed data was available or more accurate actuarial methods were adopted. However, we believe that the data used and methods adopted are appropriate for the purposes of this report. **Importantly, this report is not being provided as the basis for any funding decisions or advice and must not be used as such.**
- Given that data sources used for this report, we cannot be fully sure of their accuracy. However, we have taken reasonable measures to ensure that they seem reasonable and appropriate for the purpose of this report.
- When calculating likelihoods, we have used Hymans Robertson's proprietary economic model, the Economic Scenario Service (ESS). The ESS reflects the uncertainty associated with future levels of inflation and asset returns. Further information on the ESS is available upon request.

APPENDIX 2

Key for fund names in Chart 3 (past service funding level)

Chart number	Fund name	Chart number	Fund name	Chart number	Fund name	Chart number	Fund name
1	Kensington and Chelsea	22	Northamptonshire	43	Warwickshire	64	Redbridge
2	City of Westminster	23	Oxfordshire	44	Buckinghamshire	65	Devon
3	London Pensions Fund Authority	24	Kingston upon Thames	45	Greater Manchester	66	Cardiff and Vale of Glamorgan
4	West Sussex	25	Tyne and Wear	46	Environment Agency - active	67	City of London Corporation
5	Cambridgeshire	26	Cumbria	47	West Midlands	68	Durham
6	East Sussex	27	Gloucestershire	48	Greenwich	69	Greater Gwent (Torfaen)
7	Tower Hamlets	28	Southwark	49	Wiltshire	70	Lewisham
8	Gwynedd	29	Merton	50	Kent	71	Croydon
9	East Riding	30	West Yorkshire	51	Essex	72	Harrow
10	Staffordshire	31	Hampshire	52	Isle of Wight	73	Dorset
11	South Yorkshire	32	Suffolk	53	Surrey	74	Avon
12	North Yorkshire	33	Hertfordshire	54	Barking and Dagenham	75	Cornwall
13	Wandsworth	34	Norfolk	55	Sutton	76	Lambeth
14	Teesside	35	Merseyside	56	Worcestershire	77	Islington
15	Bromley	36	Enfield	57	Lincolnshire	78	Ealing
16	Lancashire	37	Hackney	58	Newham	79	Barnet
17	Bexley	38	Clwyd	59	Nottinghamshire	80	Somerset
18	Cheshire	39	Rhondda Cynon Taf	60	Swansea	81	Bedfordshire
19	Camden	40	Leicestershire	61	Derbyshire	82	Hillingdon
20	Haringey	41	Hammersmith and Fulham	62	Powys	83	Brent
21	Dyfed	42	Hounslow	63	Shropshire	84	Berkshire

APPENDIX 3

Key for fund names in Chart 6 (contribution rates)

Chart number	Fund name	Chart number	Fund name	Chart number	Fund name	Chart number	Fund name
1	Brent	22	Powys	43	Buckinghamshire	64	Environment Agency - active
2	Camden	23	Sutton	44	Southwark	65	Gwynedd
3	Staffordshire	24	Barking and Dagenham	45	Suffolk	66	Newham
4	Barnet	25	Croydon	46	Lewisham	67	Bromley
5	Tower Hamlets	26	Haringey	47	Cambridgeshire	68	Shropshire
6	Gloucestershire	27	Dorset	48	East Riding	69	Enfield
7	Leicestershire	28	Northamptonshire	49	Nottinghamshire	70	Bexley
8	Hackney	29	Hertfordshire	50	Oxfordshire	71	South Yorkshire
9	Waltham Forest	30	Cheshire	51	Durham	72	Greenwich
10	Havering	31	Essex	52	Greater Manchester	73	Cumbria
11	Berkshire	32	Harrow	53	Islington	74	Hampshire
12	Lincolnshire	33	Somerset	54	City of London Corporation	75	City of Westminster
13	Bedfordshire	34	Ealing	55	West Sussex	76	Tyne and Wear
14	Lambeth	35	Warwickshire	56	Kingston upon Thames	77	North Yorkshire
15	Cornwall	36	Hammersmith and Fulham	57	Wandsworth	78	Lancashire
16	Norfolk	37	Swansea	58	Cardiff and Vale of Glamorgan	79	Merton
17	West Midlands	38	Devon	59	Hounslow	80	West Yorkshire
18	Hillingdon	39	Surrey	60	East Sussex	81	Dyfed
19	Greater Gwent (Torfaen)	40	Derbyshire	61	Worcestershire	82	Clwyd
20	Isle of Wight	41	Kent	62	Redbridge	83	Merseyside
21	Wiltshire	42	Avon	63	Rhondda Cynon Taf	84	Teesside