

Teesside Pension Fund

2022 valuation – employer forum

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10 February 2023

What we will cover today

- 1 Background to the 2022 valuation
- 2 Inputs at 2022
- 3 Models
- 4 2022 valuation results



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How the Fund works



Collect money
(contributions)



Invest money
(its assets)



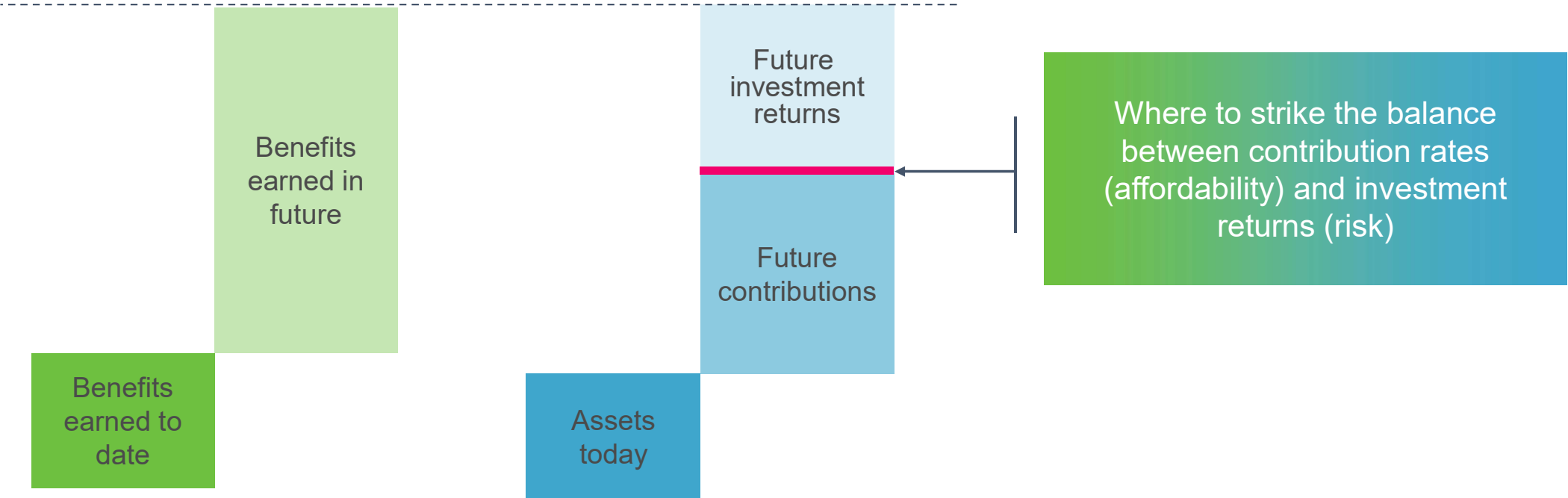
Pay money out
(benefits)

Contributions and investment returns fund all the benefits

Key funding decision

Liabilities

Assets



Why we do a valuation?



Calculate employer contribution rates



Compliance with legislation



Analyse actual experience vs assumptions



Review Funding Strategy Statement



Part of continual 'health check' on fund solvency

The valuation is a key risk management for the fund

How we do the valuation

Inputs

Data for each member

Financial and demographic assumptions

Funding and investment strategy

LGPS benefit structure

Actuary's models



Primary outputs



Individual employer results schedule



Updated Funding Strategy Statement



Final valuation report

2022 valuation timetable

Q1 2022 – Q2 2022

Pre-valuation work:

- Planning
- Data cleansing
- Review of high-level funding & investment strategy
- Discussion of stabilisation mechanism for some employers



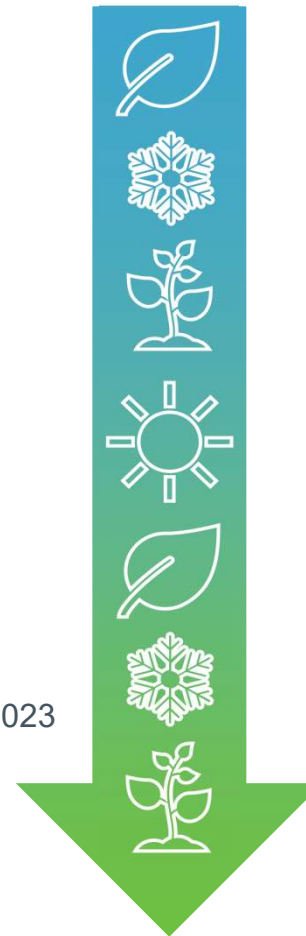
Q4 2022

Initial results & discussions with Officers



Q1 2023

Funding strategy statement finalised
Final valuation report signed off by 31 March 2023



Q2 2022 – Q3 2022

Data cleansed and submitted to actuary
Review of assumptions
Funding Strategy Statement review



Q1 2023

Employer results issued to employers
Employer Forum & consultation period
Funding Strategy Statement consultation



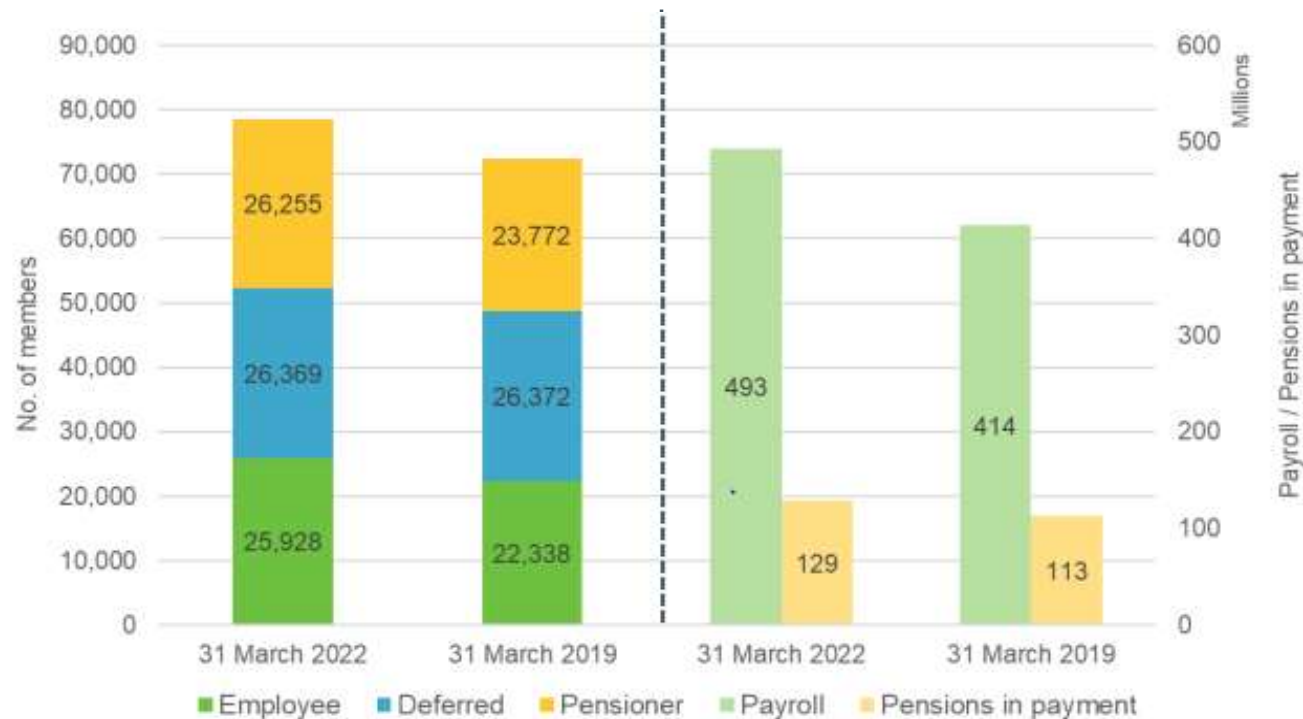
1 April 2023

New employer contributions start to be paid



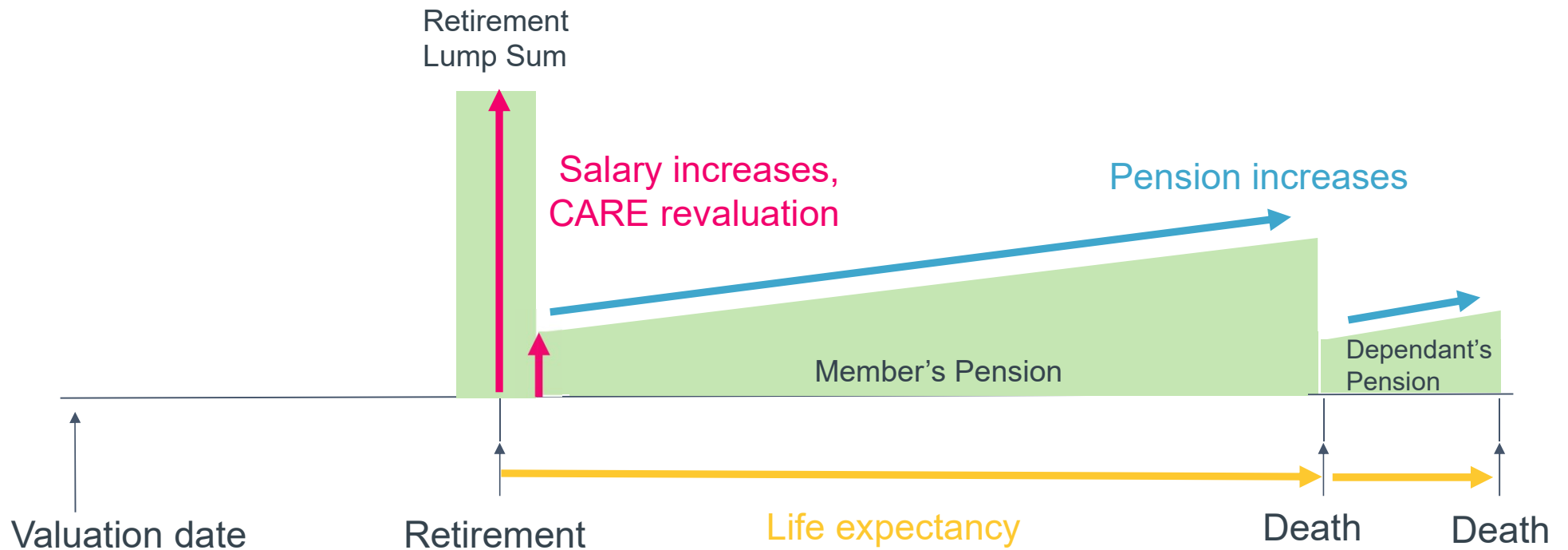
Inputs at 2022

Membership data as at 31 March 2022 (whole Fund)



**High quality membership data underpins everything
Check your own data summary – p4 of results schedule**

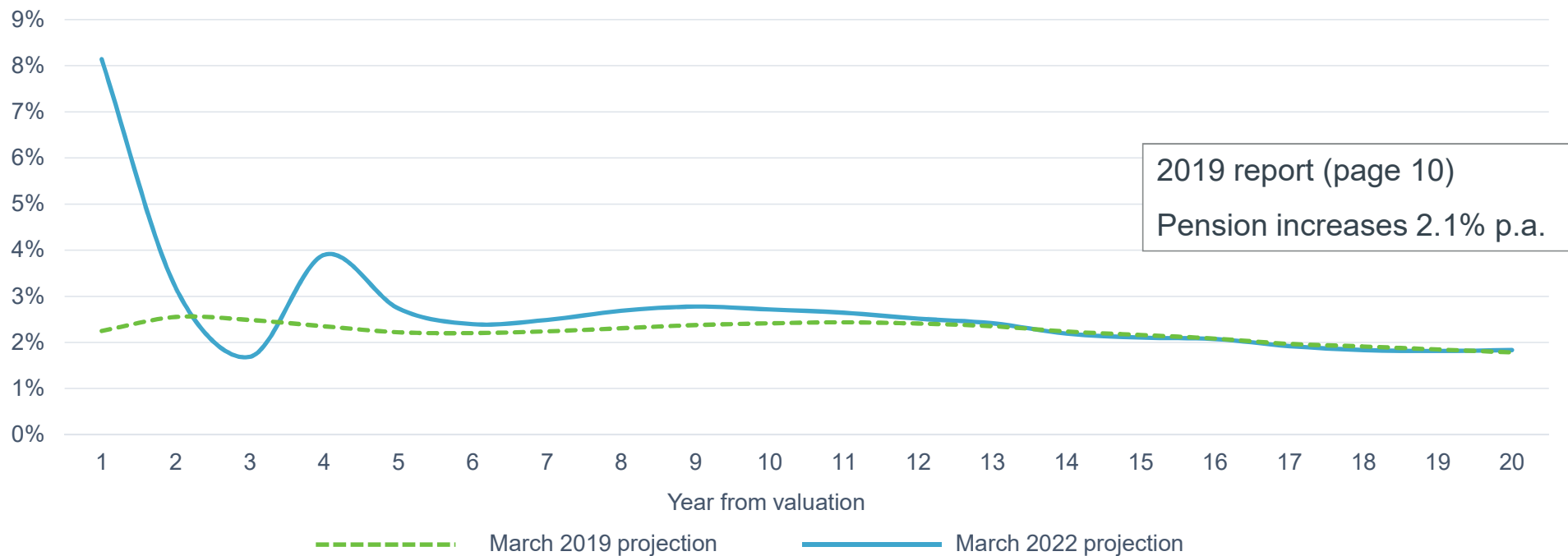
Assumptions – why they are needed



No significant changes in financial assumptions, except for inflation...

CPI inflation – 2019 vs. 2022

Annual CPI inflation – 2019 vs. 2022 (on Hymans model)

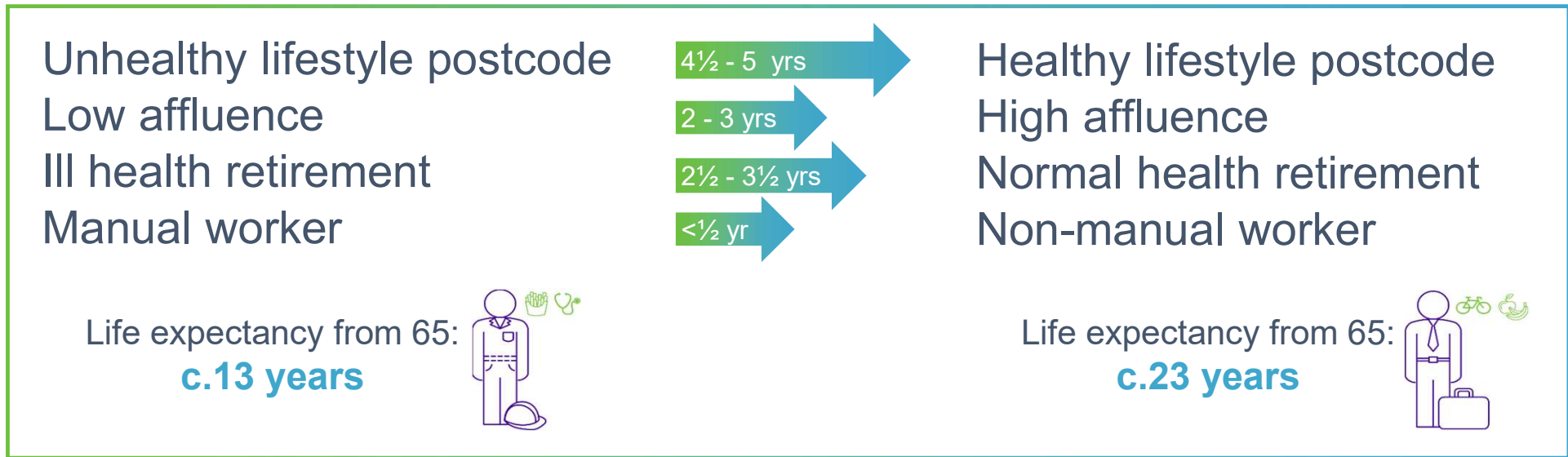


2019 report (page 10)
Pension increases 2.1% p.a.

Average level of future inflation: 2019 = 2.3% pa (Hymans), 2022 = 2.7% pa

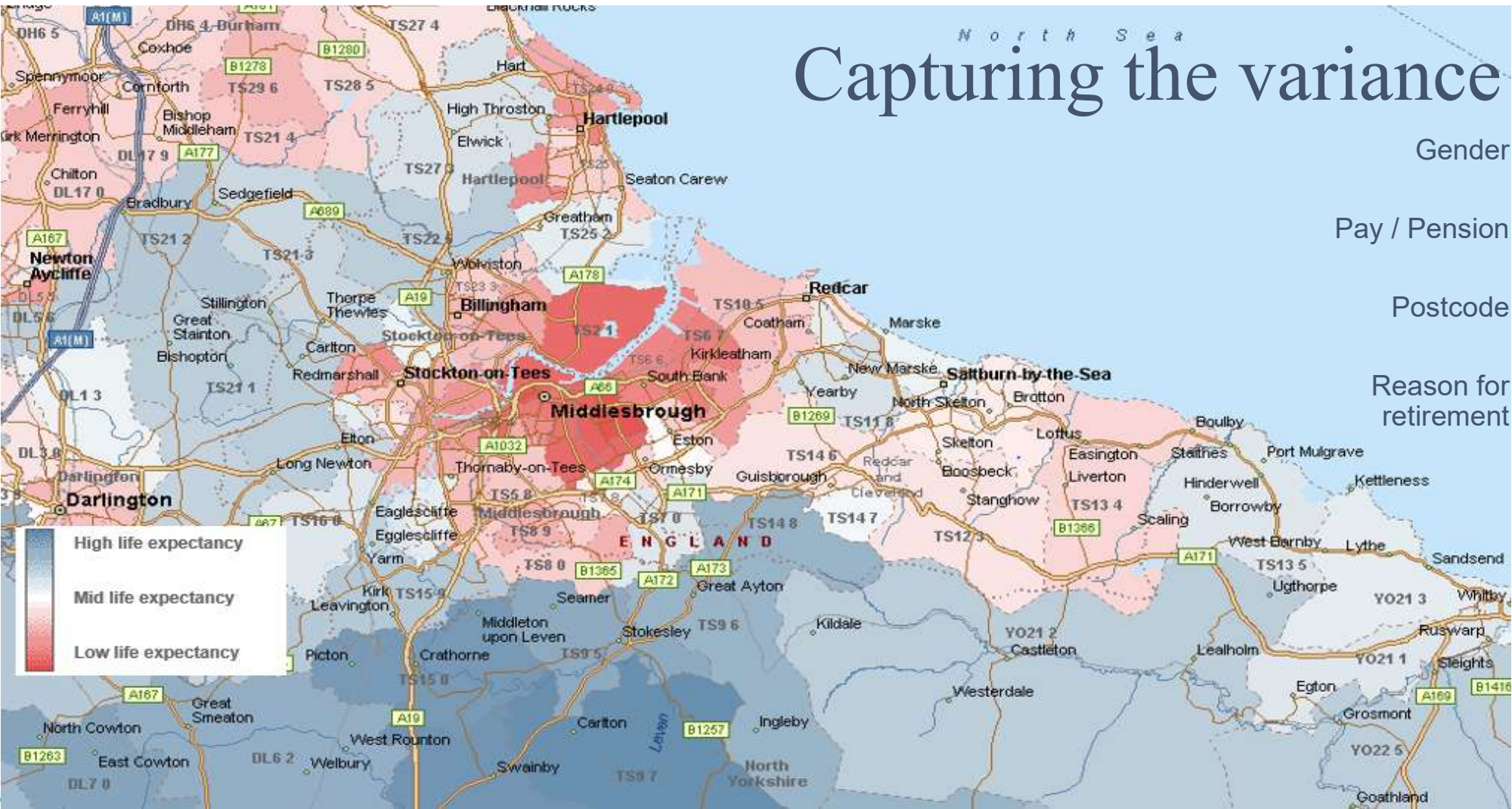
Focus on life expectancy

- Observed life expectancy varies significantly between members

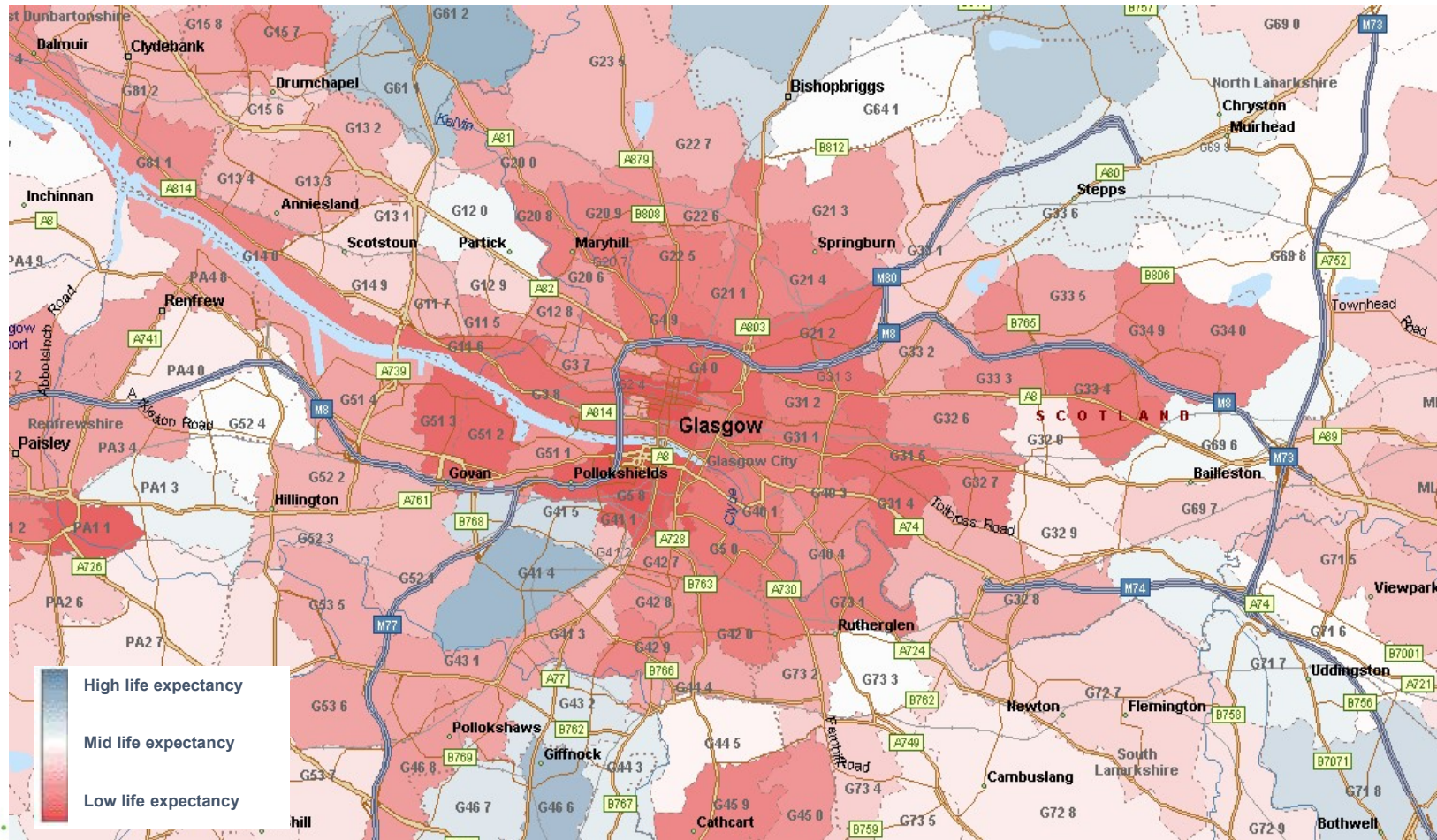


Very important to capture this variance in the life expectancy assumption

Capturing the variance



If only this was a weather heat map...



Covid-19 and life expectancy assumption

Lower longevity improvements



Short term risk of COVID-19

There is a risk that we see further waves of infection as social distancing measures are relaxed/removed



Long term risk of COVID-19

Disease could continue to be a risk without maintaining an effective vaccine.



Impaired long-term health

The long-term health of those who were infected with COVID-19 but survived the virus might be damaged.



Disruption to non-COVID care

Deterioration of patients with non-coronavirus conditions due to delays in treatment (e.g. cancer)



Global recession

A global recession may impact future public sector spending in health care.

Higher longevity improvements

Survivorship bias

The average health of the surviving population could be higher in the years following the outbreak.



Reduced circulation of flu

Change in social behaviour (e.g. increased handwashing) may reduce prevalence of flu and other infectious diseases in future.



Reduction in air pollution

Change in social behaviour may result in the reductions to air pollution persisting.



Reduction in smoking

Disease may have encouraged existing smokers to stop.



Health/social care funding increase

Issues with funding unearthed during the pandemic may be more likely to be addressed.



Insufficient evidence to justify change in life expectancy assumption

Funding strategy– what’s changed?

Similarities to the 2019 valuation

- Risk based approach
 - Uses “likelihood of success”
- Contribution rate for each employer
 - Some individual, some pooled
- Uses financial and demographic assumptions
 - At valuation date i.e. 31 March 2019
- 2019 FSS
 - Drafted by Aon

Differences to the 2019 valuation

- Setting time horizons
 - Maximum reduced from 25 years to 20 years
- Return of surplus
 - Returned over time horizon
- Some assumptions not directly comparable
 - Actuaries use different models
- 2022 FSS
 - Drafted by Hymans

Strategy – update at 2022

2022 valuation funding strategy

Employer type	Funding target	Standard Time horizon	Minimum Likelihood of success	Stabilised contributions
Local Authorities	Ongoing	20	75%	Yes
Police and Fire	Ongoing	20	75%	Yes
Academies	Ongoing	20	75%	Yes
Colleges	Ongoing	20	75%	Yes
Town & Parish Councils	Ongoing	20	75%	Yes
Transferee Admission Bodies	Ongoing	Employer specific	75%	No
Community Admission Bodies	Employer specific	Employer specific	75%	No

Rates are subject to Fund discretion and employer circumstances

Benefit structure - McCloud

- Extension of 'best-of' underpin for service between 2014 & 2022
- Given the 'best-of' nature, some members may see an increase in benefits
- At 2022, more certainty about the format of the remedy in LGPS
- DLUHC have 'recommended' how funds allow for McCloud at the 2022 valuation
- Teesside Pension Fund will follow recommendation and build it into liability calculations

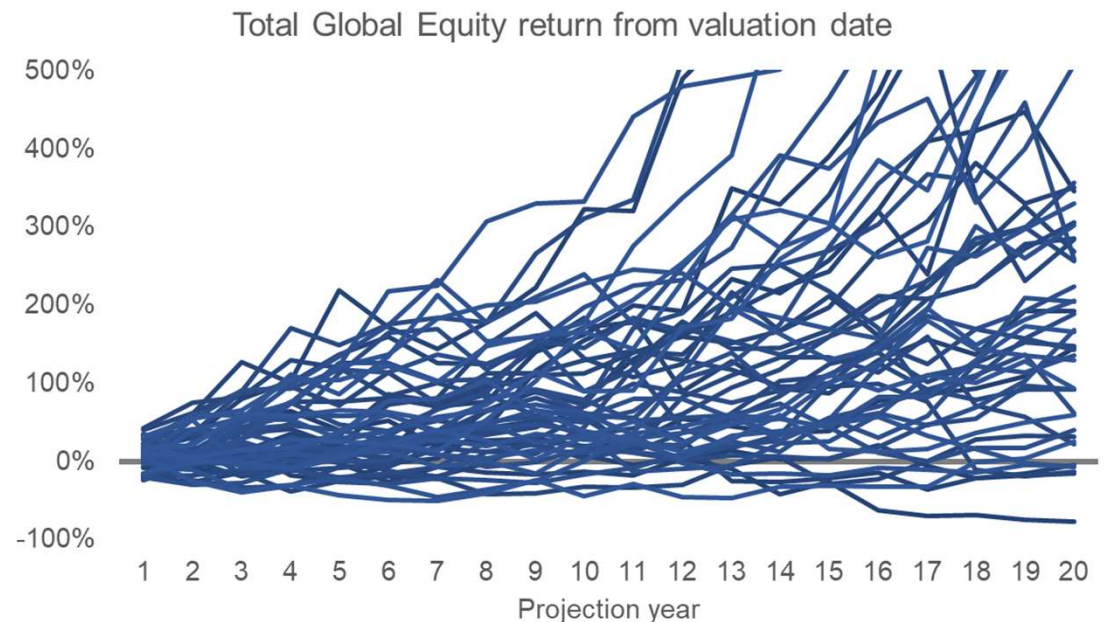
Overall cost impact small (c0.2% of liabilities), but will vary by employer

Models

(this will be quick, we promise!)

Risk-based valuation approach

- Future investment returns and inflation are uncertain and volatile
- Use a valuation approach which reflects the real-world
- Capturing uncertainty allows users to better understand risk in the funding plan
- Model 5,000 different future economic scenarios



Similar evolution to weather forecasts!

Source: Hymans Robertson ESS model

Investments and impact on the valuation

Asset allocation based on the strategy set out in the Fund's Investment Strategy Statement, dated April 2022.

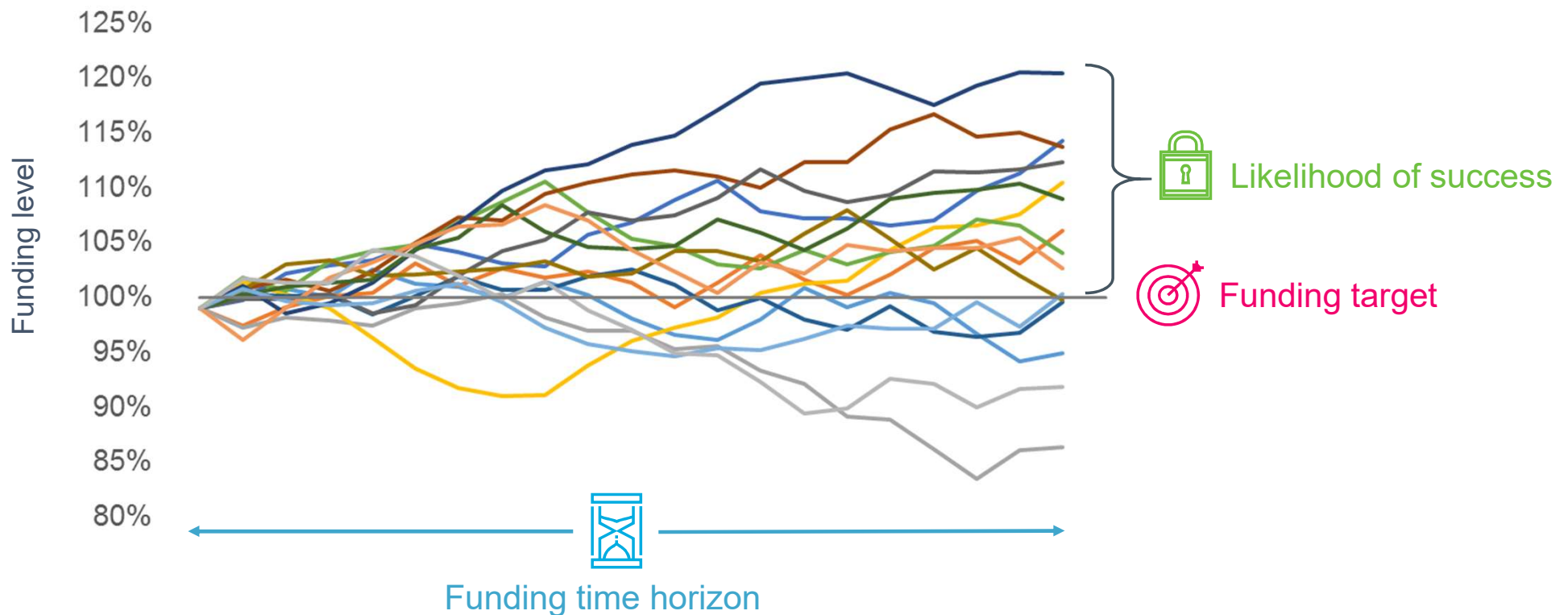
Mix of allocated assets

- Global equities
- UK equities
- Property
- Infrastructure
- Bonds

Asset class	Allocation
UK equities	10.0%
Global equities (unhedged)	40.0%
EM equities (unhedged)	5.0%
Property	13.5%
Private Equity	6.5%
Index linked gilt (24 yr maturity)	3.0%
A Credit (4 yr maturity), duration hedged	4.0%
Infrastructure equity (unlisted)	10.0%
Asset Backed Securities	5.0%
Multi Asset Credit (sub investment grade)	1.0%
Cash	2.0%
Total	100.0%

Contributions and investment returns are both needed to pay future benefits

Setting risk-based contribution rates



Set contribution rate to have sufficiently high likelihood of meeting the funding target at the end of the time horizon

2022 valuation results (outputs)

Single reported 2022 funding position

- Funding position has improved since 2019
- Important to remember limitations with funding level
 - It only considers past service
 - It is a snapshot on one particular day, it will fluctuate

Valuation Date	31 March 2022	31 March 2019
Past Service Liabilities	(£m)	(£m)
Employees	1,532	1,223
Deferred Pensioners	769	627
Pensioners	2,050	1,711
Total Liabilities	4,351	3,561
Assets	5,042	4,088
Surplus/(Deficit)	691	527
Funding Level	116%	115%

Numbers may not add up due to rounding

Funding level improvement lower than LGPS peers*

* [2022 valuation results - early insights - Hymans Robertson](#)

What's changed since 2019

Expected development

Change in the surplus/deficit position	Assets	Liabilities	Surplus / Deficit
	£m	£m	£m
Last valuation at 31 March 2019	4,088	3,561	527
Cashflows			
Employer contributions paid in	202	-	202
Employee contributions paid in	90	-	90
Benefits paid out	(450)	(450)	0
Net transfers into / out of the Fund			
Other cashflows (e.g. Fund expenses)	(22)	-	(22)
Expected changes			
Expected investment returns	510	-	510
Interest on benefits already accrued	-	491	(491)
Accrual of new benefits	-	362	(362)
Expected position at 31 March 2022	4,418	3,964	454

Impact of actual events

Change in the surplus/deficit position	Assets	Liabilities	Surplus / Deficit
	£m	£m	£m
Expected position at 31 March 2022	4,418	3,964	454
Events between 2019 and 2022			
Salary increases less than expected	-	(46)	46
Benefit increases less than expected	-	(28)	28
Early retirement strain (and contributions)	11	13	(2)
Ill health retirement strain	-	(4)	4
Early leavers more than expected	-	0	0
Commutation less than expected	-	7	(7)
McCloud remedy	-	10	(10)
Other membership experience	-	(34)	34
Higher than expected investment returns	612	-	612
Changes in future expectations			
Investment returns	-	145	(145)
Inflation	-	379	(379)
Salary increases	-	11	(11)
Longevity	-	(65)	65
Other demographic assumptions	-	(2)	2
Actual position at 31 March 2022	5,042	4,351	691

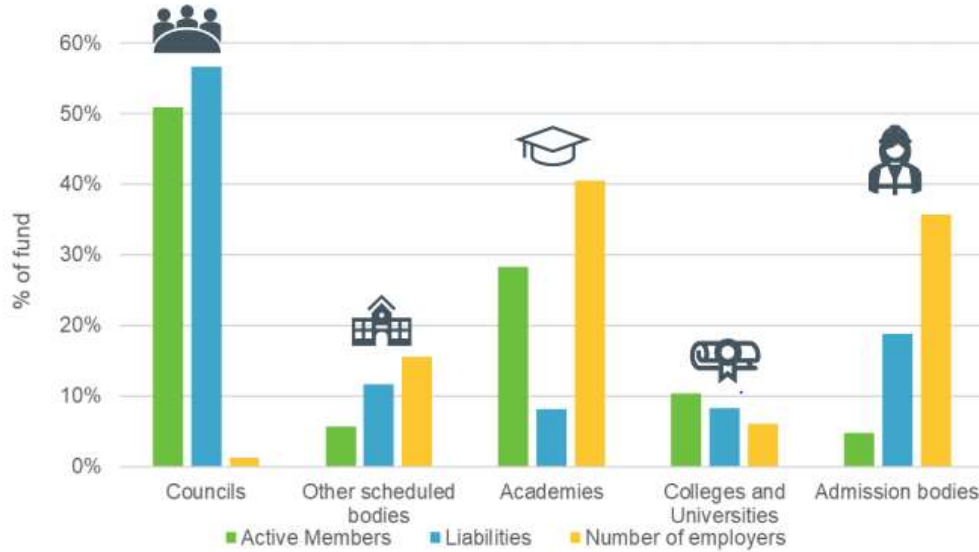
Numbers may not add up due to rounding

Investment returns and future inflation, key drivers at 2022

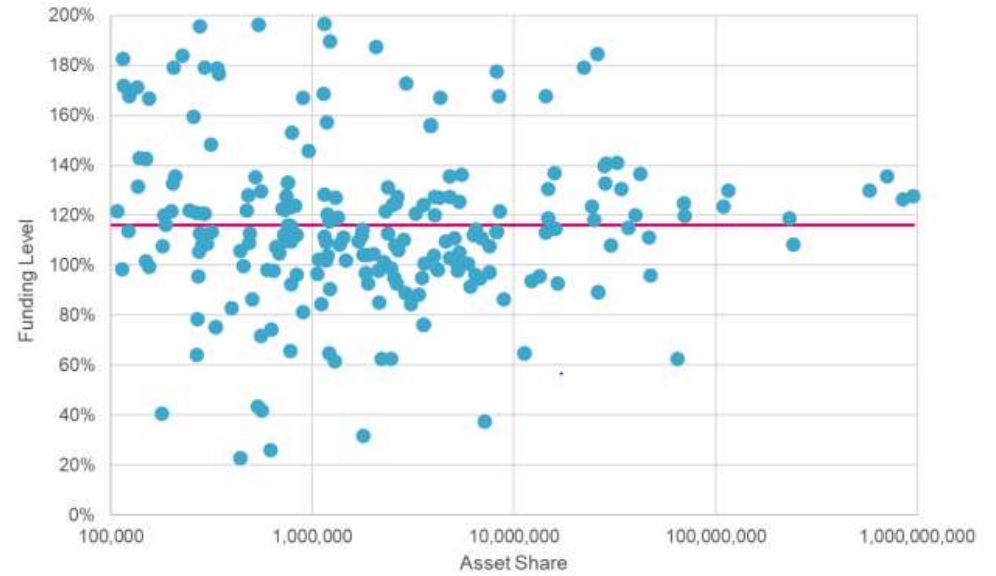
* We do not collect the level of detail necessary to value the impact on the liabilities as a result of transfers in/out

Employer-level results

Fund employers by type



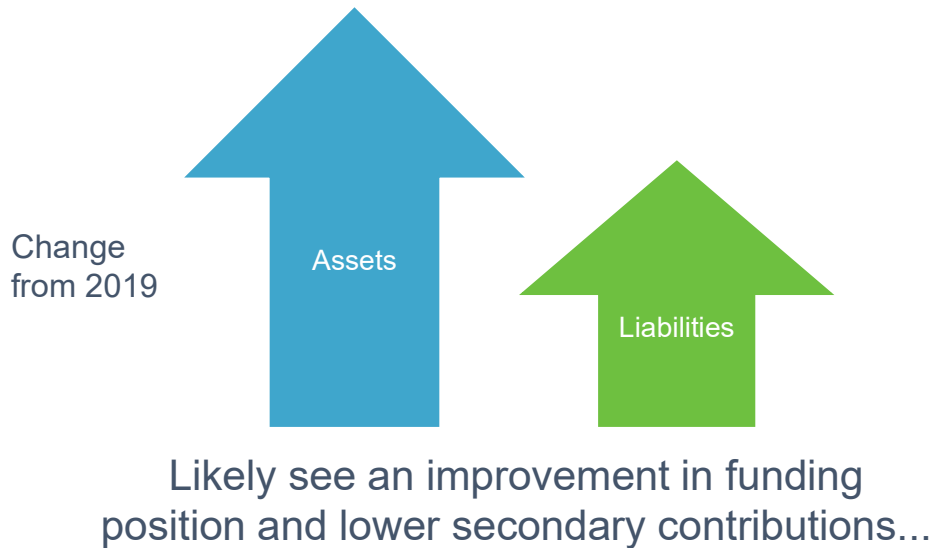
Employer funding level vs asset share



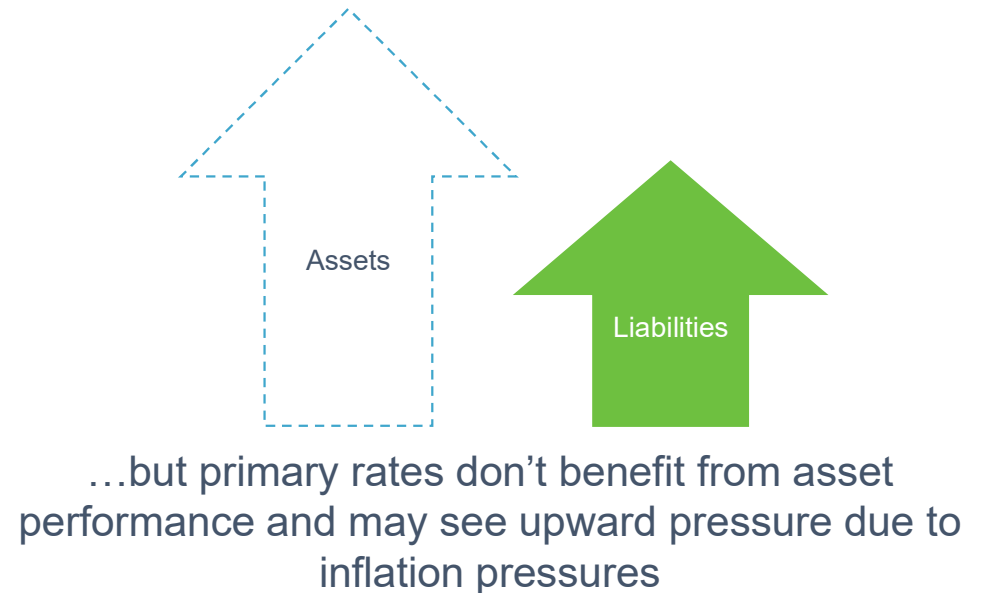
Funding is carried out at individual employer level

Funding theme at 2022 valuation

Funding position + secondary contributions



Primary contributions



Net impact will vary by employer, depending on funding profile

Your own contribution rates from 1 April 2023

Example employer

	Primary		Secondary		Total	
Employer contribution rates for year ending	% of pay	% of pay	£	% of pay	£	
31 March 2023				17.5%	0	
31 March 2024	19.7%	-2.2%	0	17.5%	0	
31 March 2025	19.7%	-2.2%	0	17.5%	0	
31 March 2026	19.7%	-2.2%	0	17.5%	0	

The above contribution rates are the minimum rate required by the Fund. In most circumstances you can pay additional contributions to improve your funding position but this should be referred to the actuary first. The Primary Rate includes an allowance of 0.6% of pay for administration expenses. Employer contribution rates are due in addition to employee contributions. The average employee contribution rate is 5.9% of pay.

Outlined on p1 of your own results schedule

Other factors causing diversity in results

Funding profile

Balance between past and future service matters at 2022

Membership experience

Events such as ill-health retirements, salary increases will affect your funding position

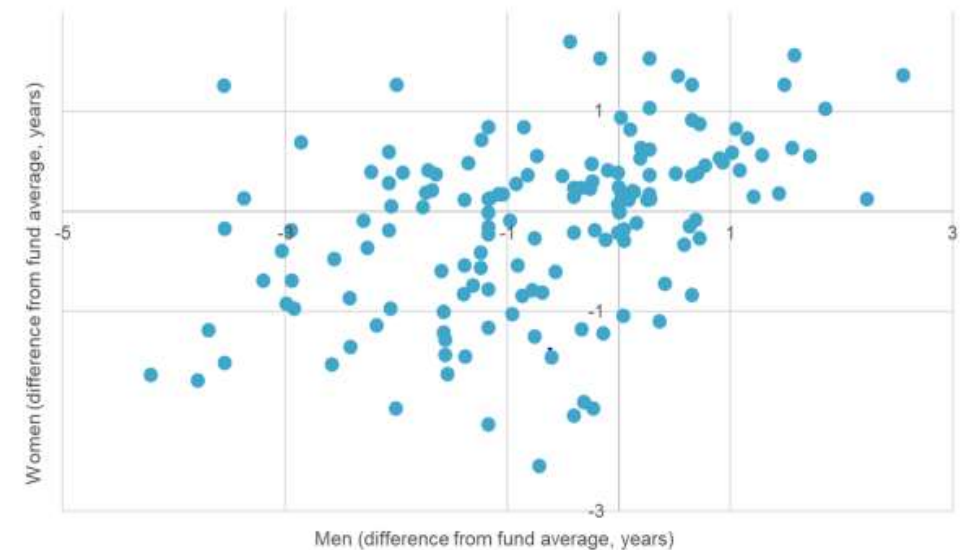
Membership profile

Differences such as age and gender will affect the contribution rate

Contributions being paid

Higher contributions will result in a larger funding level improvement

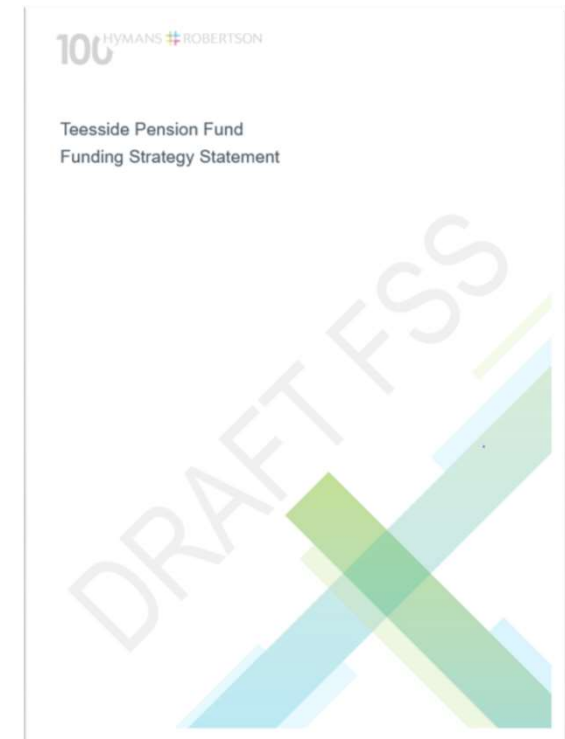
Difference in average life expectancy (from fund average) at employer level



No two employers are the same

Funding Strategy Statement review

- No material changes in funding strategy at 2022 valuation, but streamlined for many employers
- Used the opportunity to review structure and layout of the FSS
- Improve accessibility and navigation for stakeholders
- Updated FSS for consultation with all employers



Please read, understand what it means for you and let the fund know any thoughts

Next Steps

Q1 2022 – Q2 2022

Pre-valuation work:

- Planning
- Data cleansing
- Review of high-level funding & investment strategy
- Review of stabilisation mechanism for precepting employers



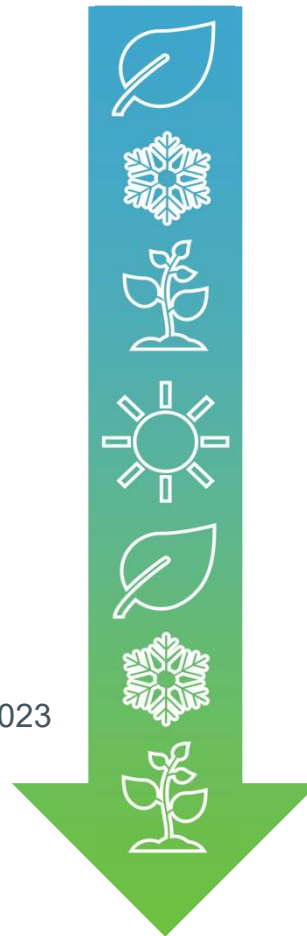
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Q1 2023

Employer results issued to employers
Employer Forum & consultation period
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1 April 2023

New employer contributions start to be paid

What you need to do



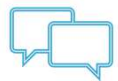
Read the results schedule

Check the data is correct, understand your current funding position and the rate that will come into payment from 1 April 2023



Review the updated Funding Strategy Statement

Understand how the fund's strategy applies to your participation in the fund



Talk to the fund

Ask any questions and let them know about any possible changes in circumstances

Summary of 2022 valuation

1

Funding position

Past service funding position has improved since 2019

2

Reasons for change

Strong investment returns more than offset higher inflation

3

Contribution rates

Primary rate: upward pressure
Secondary rates: some relief
Overall impact will vary between employers

Please contact the fund if you have any questions about your results

2022 valuation and 2023 accounting

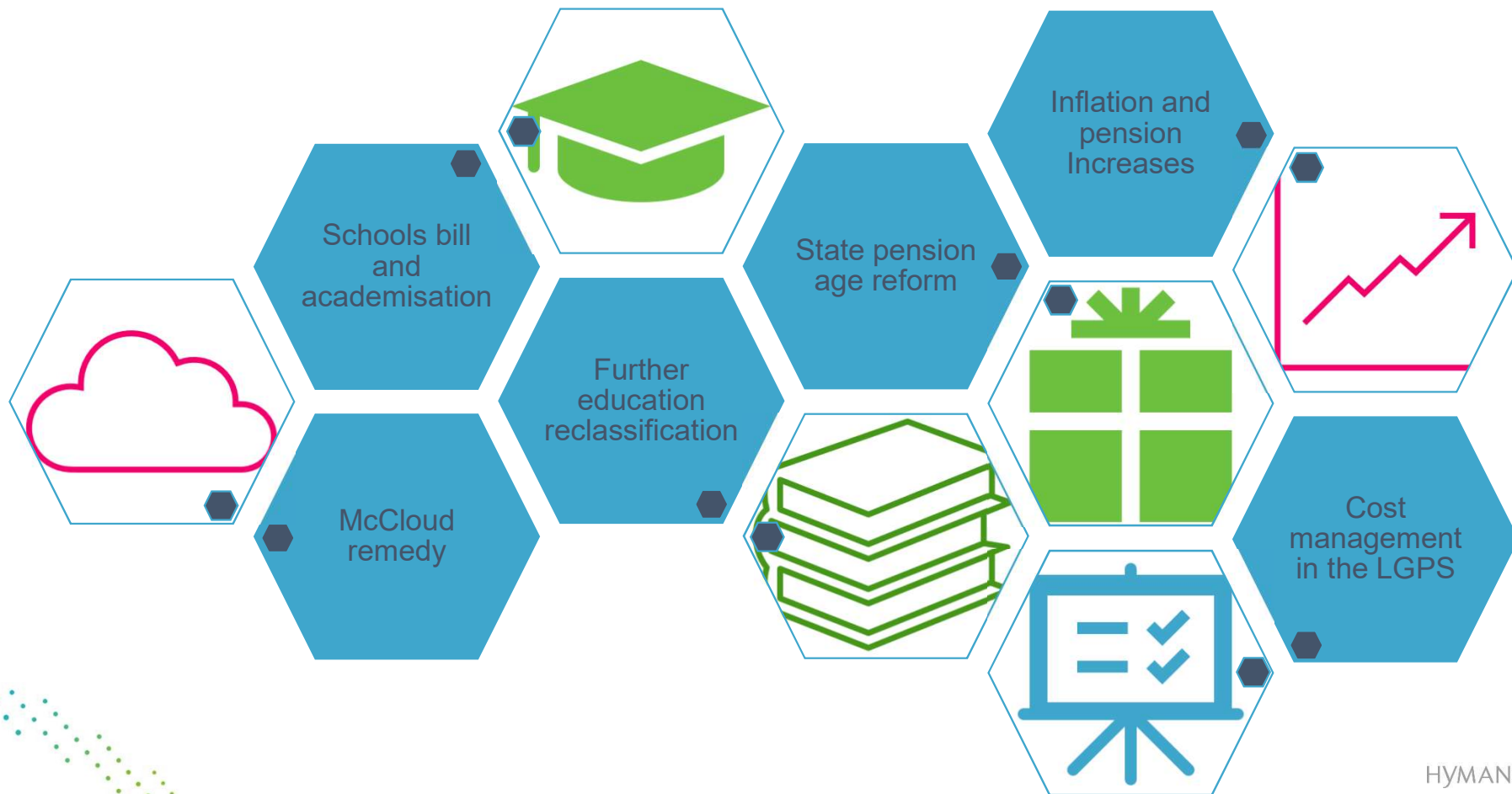
Accounting reports now roll forward from 2022 valuation positions

- Updated membership data
- Updated demographic and mortality assumptions
- Salary increase assumption remains at CPI+1%
- Discount rate determined by accounting standard
- Expect “experience” items under remeasurements.

Remeasurements			
Changes in financial assumptions		(1,415)	1,415
Changes in demographic assumptions		(7)	7
Other experience	-	4	(4)
Return on assets excluding amounts included in net interest	(154)		(154)
Total remeasurements recognised in Other Comprehensive Income (OCI)	(154)	(1,418)	1,264

Accounting assumptions ultimately the responsibility of the employer

Current issues and future developments



Thank you

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