

Staffordshire Pension Fund

Investment Benchmarking Results

For the 5-year period ending the 31st March 2023

05-12-2023



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This benchmarking report provides an independent assessment of value-for-money.

We compare your costs with other pension funds, inside and outside the LGPS. To provide context, we also compare your investment performance, asset mix, risk, funding etc. What emerges is a narrative about your fund, how it compares with others and why your investment outcomes compare as they do.

Cost

- How do our costs compare and why?
- Where are we paying more / less than others?
- What is the trend in our costs?
- How is the pool impacting our costs?

Performance

- Costs need to be seen in the context of performance.
- How do our returns compare with others and why?
- Are our active management decisions being rewarded?
- What has the pool contributed?

Risk

- How does the risk in our portfolio compare with others?
- How does risk relate to relative funding levels?

Value-for-Money

- If we are paying more then are we getting more?
- How does our net value add compare with others?
- How is the pool contributing?

The report is accompanied by an on-line dashboard. The dashboard allows your management team to drill-down on key metrics and access detailed comparisons of cost, performance and value at an asset class and mandate level.

The footnotes of this report are listed in appendix 9.

Care is taken to validate the data contained in the report. This includes automated validations on outlying or unusual data as it is submitted, and an additional manual data 'clean' where our analysts interact with fund personnel to ensure the data is fit for purpose. Detailed notes and definitions are included as an appendix to the report.

We compare your costs with 41 global peer funds ranging from £4.6 bn to £11.2 bn.

The peer group is selected to answer two key questions:

1. *Are your costs reasonable for a fund of your size and with your assets?*
2. *Is your pool delivering value-for-money?*

Peer group is selected:

- Based on size - because size impacts costs.
- To include both LGPS and non-LGPS funds globally.
- For depth - to compare mandate level data.

The median size in the peer group is £7.3 bn (versus your average assets of £7.0 bn).

We have detailed your full list of peers in appendix 1.

# funds:	41
# LGPS funds included:	7
	Essex Pension Fund
	London Pension Funds Authority
	Lothian Pension Fund
	Merseyside Pension Fund
	NILGOSC
	South Yorkshire Pensions Fund
	Staffordshire Pension Fund
Min size:	£4.6 bn
Max Size:	£11.2 bn
Avg size:	£7.6 bn
Med Size:	£7.3 bn
# Countries:	4.0
Countries:	Canada, Netherlands, UK, USA.

We are benchmarking investment costs of £36.0m or 51.0 bps in 2023.

Assets	Internal costs and pool mgt fees ¹ £000s	External			Total		Trans. costs ³ £000s	Other expenses ⁴ £000s
		Passive fees £000s	Active base fees ² £000s	Active perf. fees ² £000s	£000s	bps		
Pooled sub-funds								
Targeted Sustainable Equities	69				69	32.9	51	7
Factor Based Equities		171			171	7.0	414	102
Global Equity Active Multi Manager			1,524	0	1,524	20.9	2,154	97
Corporate Bonds		412			412	9.9	1,402	57
Single Asset (JPM)			456	480	935	156.0		
Infrastructure SubFund Core/Plus			231	406	637	408.4		
Private Equity 2018 & 2021			139	200	339	440.2		
Credit Partnership I LP, II LP & IV LP			360	454	814	283.1		
Total pooled assets	69	583	2,709	1,540	4,901	32.2	4,020	262
Non-pooled assets								
Equities		515	3,378		3,893.0	10.6		
Bonds		43			43.0	0.7		
Real assets			2,462	1,646	4,108.3	66.4		
Private equity			7,392	6,323	13,714.3	401.7		2,601
Private debt			4,376	2,541	6,916.9	233.4		
Total non-pooled assets		558	17,608	10,510	28,676	51.9		2,601
Oversight, custodial and other costs					1,221	1.7		
LGPS pool fees					1,158	1.6		
Total oversight, custodial, pool and other costs⁵					2,378	3.4		
Total benchmarked costs⁶					35,955	51.0		

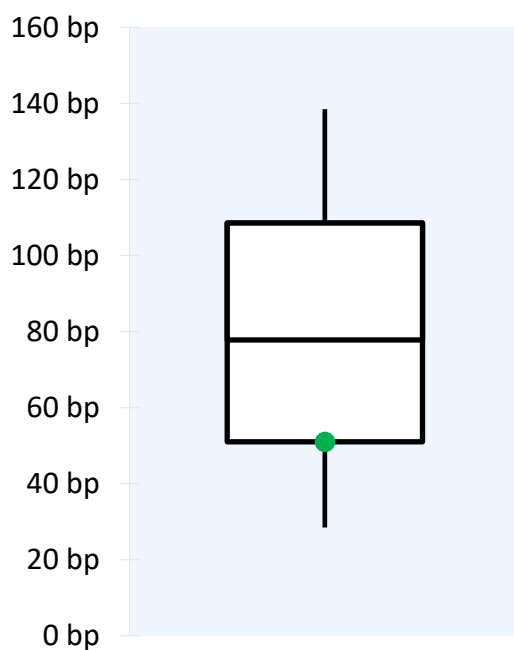
Please see appendix 2 for the full breakdown of all your mandates. See appendix 3 for the defaults that CEM applied for missing fees.

Your cost of 51.0 bps was below your benchmark cost of 53.0 bps.

Comparison of costs *before adjusting for asset mix* :

Before adjusting for differences in asset mix, your costs of 51.0 bps were 26.8 bps below the peer median of 77.8 bps.

Your cost versus peers
(before adjusting for asset mix differences)



Comparison of costs *after adjusting for asset mix* :

To calculate a benchmark cost we apply peer median costs at an asset class level to your asset mix (i.e., we adjust for differences in asset mix).

Your cost versus benchmark
(after adjusting for asset mix differences)

	£000s	bps
Your investment cost	35,955	51.0
Your benchmark cost	37,385	53.0
Difference	(1,430)	(2.0)

The difference can be broken down as follows:

	£000s	bps
Lower use of active management	(3,989)	(5.7)
Within pooled assets	(183)	(0.3)
Investment strategy decisions	1,402	2.0
Paying less for structure	(1,586)	(2.2)
Within non-pooled assets	2,529	3.6
Investment strategy decisions	5,759	8.2
Paying less for structure	(3,230)	(4.6)
Oversight, custody, pool & other costs*	213	0.3
Total	(1,430)	(2.0)

* Includes LGPS pool fees not allocated to specific sub-funds of £1,158k, or 1.6bps. Peers reported an average of 1.7bps. These unallocated costs are related to the establishment of pools, and are expected to disappear over time as all costs are attributed appropriately to the sub-funds.

Pooled assets saved you 0.3bps / £0.2m due to a lower cost structure. This was partially offset by a higher cost strategy.

Sub-fund	Investment strategy	Structure	Avg. fee basis £m ¹ a	You paid (bps) b	Strategy Benchmark (bps) c	Structure Benchmark (bps) d	Strategy impact £000s a x (d - c)	Structure impact £000s a x (b - d)	Total £000s
Costs of pooled mandates in relation to peers									
Targeted Sustainable Equities	Equities - Global - Active	Internal	21	32.9	36.1	11.3	(52)	45	(7)
Factor Based Equities	Equities - Global - Passive	External	244	7.0	3.9	3.9	(1)	77	77
Global Equity Active Multi Manager Fund	Equities - Global - Active	External	731	20.9	36.1	45.0	651	(1,763)	(1,112)
Corporate Bonds	Bonds - other - Passive	External	415	9.9	5.1	5.7	22	177	199
Single Asset (JPM)	Infrastructure	Evergreen	60	76.0	88.0	76.0	(72)	0	(72)
Performance fees (on NAV)	Infrastructure	Evergreen	60	80.0	94.7	80.0	(88)	0	(88)
Infrastructure SubFund Core/Plus	Infrastructure	Fund of funds	16	148.4	88.0	164.7	120	(25)	94
Performance fees (on NAV)	Infrastructure	Fund of funds	16	260.0	94.7	260.0	258	0	258
Private Equity 2018 & 2021	Private equity - Diversified	Fund of funds	8	180.2	172.6	213.8	32	(26)	6
Performance fees (on NAV)	Private equity - Diversified	Fund of funds	8	260.0	165.3	186.9	17	56	73
Credit Partnership I LP, II LP & IV LP	Private credit	Fund of funds	29	125.1	96.1	169.5	211	(128)	84
Performance fees (on NAV)	Private credit	Fund of funds	29	158.0	51.7	158.0	306	0	306
Total							1,402	(1,586)	(183)
Total impact in bps							2.0	(2.2)	(0.3)

Investment strategy refers to the asset class invested in, and whether the approach is active or passive. Structure is the model used to invest: internal direct, open-end fund, limited partnership, co-invest or fund of funds.

The strategy benchmark is the cost peers pay for the investment strategy, while the structure benchmark refers to the cost only for those using the same structure within that strategy.

Non-pooled assets added cost of 3.6bps / £2.5m due to a higher cost strategy. This was partially offset by a lower cost structure.

Investment strategy	Structure	Avg. fee basis £m ¹ a	You paid (bps) b	Strategy Benchmark (bps) c	Structure Benchmark (bps) d	Strategy impact £000s a x (d - c)	Structure impact £000s a x (b - d)	Total £000s
Equities - UK - Passive	External	240	1.3	8.7	8.7	0	(179)	(179)
Equities - Global - Passive	External	2,116	2.3	3.9	3.9	(5)	(331)	(336)
Equities - Global - Active	External	1,304	25.9	36.1	45.0	1,162	(2,490)	(1,329)
Bonds - Inflation indexed - Passive	External	430	1.0	2.0	2.0	0	(42)	(42)
Domestic property	Evergreen	530	25.4	37.4	41.5	218	(854)	(636)
Performance fees (on NAV)	Evergreen	530	5.0	5.3	5.0	(18)	0	(18)
Infrastructure	LP	85	120.7	88.0	120.7	277	0	277
Performance fees (on NAV)	LP	85	150.0	94.7	150.0	469	0	469
Infrastructure	Fund of funds ²	4	226.0	88.0	164.7	32	25	57
Performance fees (on NAV)	Fund of funds ²	4	260.0	94.7	260.0	68	0	68
Hedge funds	Fund of funds ²	2	0.0	143.9	175.2	7	(38)	(31)
Performance fees (on NAV)	Fund of funds ²	2	0.0	192.1	183.1	(2)	(39)	(41)
Private equity - Diversified	Fund of funds ²	341	216.5	172.6	213.8	1,407	91	1,498
Performance fees (on NAV)	Fund of funds ²	341	185.2	165.3	186.9	738	(56)	681
Private credit	LP	274	142.4	96.1	121.0	685	588	1,273
Performance fees (on NAV)	LP	274	80.0	51.7	80.0	778	0	778
Private credit	Fund of funds ²	22	213.2	96.1	169.5	161	96	256
Performance fees (on NAV)	Fund of funds ²	22	158.0	51.7	158.0	233	0	233
Overlays						(449.6)	0.0	(449.6)
Total						5,759	(3,230)	2,529
Total Impact in bps						8.2	(4.6)	3.6

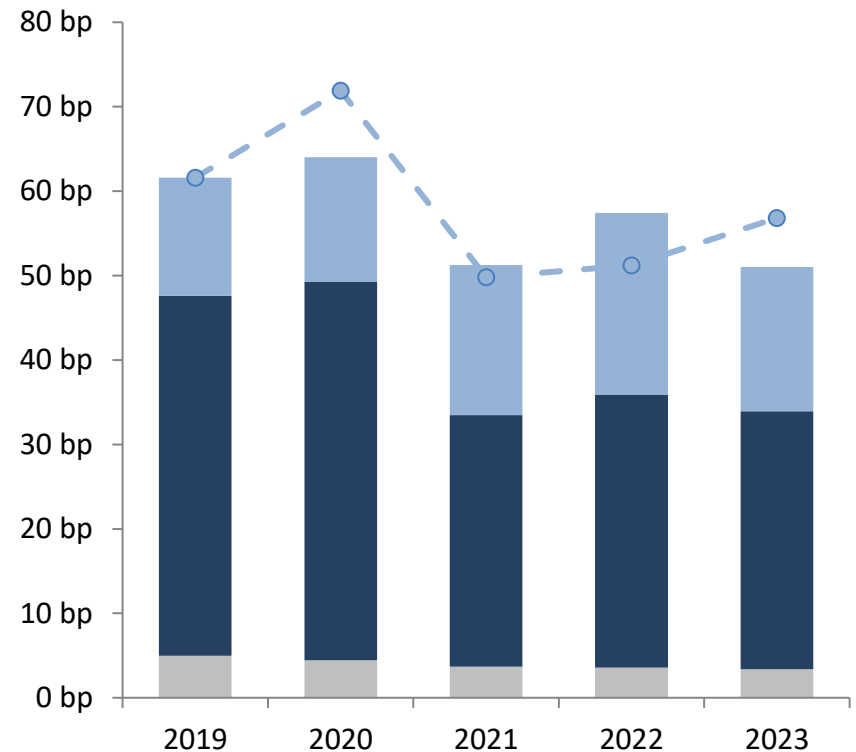
Your benchmarked costs fell from 61.6 bps in 2019 to 51.0 bps in 2023.

Your costs change over time because:

1. Your asset mix changes.
2. Your implementation approach changes, e.g., moving from active to passive or external to internal (or vice versa).
3. What you pay for mandates changes over time because:
 - Performance fees (if applicable) are variable.
 - Your line-up of managers and mandates changes.
 - Some mandates have cost bands that vary with assets.

The asset mix impact line on the graph shows the predicted change of your costs based on asset mix alone. It assumes that what you paid for each mandate and how you implemented your strategy was unchanged from the baseline year.

Investment cost changes (bps)



Performance	14.0	14.8	17.8	21.6	17.1
Base and internal	42.7	44.8	29.8	32.3	30.5
Oversight	5.0	4.4	3.7	3.6	3.4
Total	61.6	64.0	51.2	57.4	51.0
Asset mix impact	61.6	71.9	49.8	51.2	56.8

Your investment costs decreased by more than predicted by your asset mix.

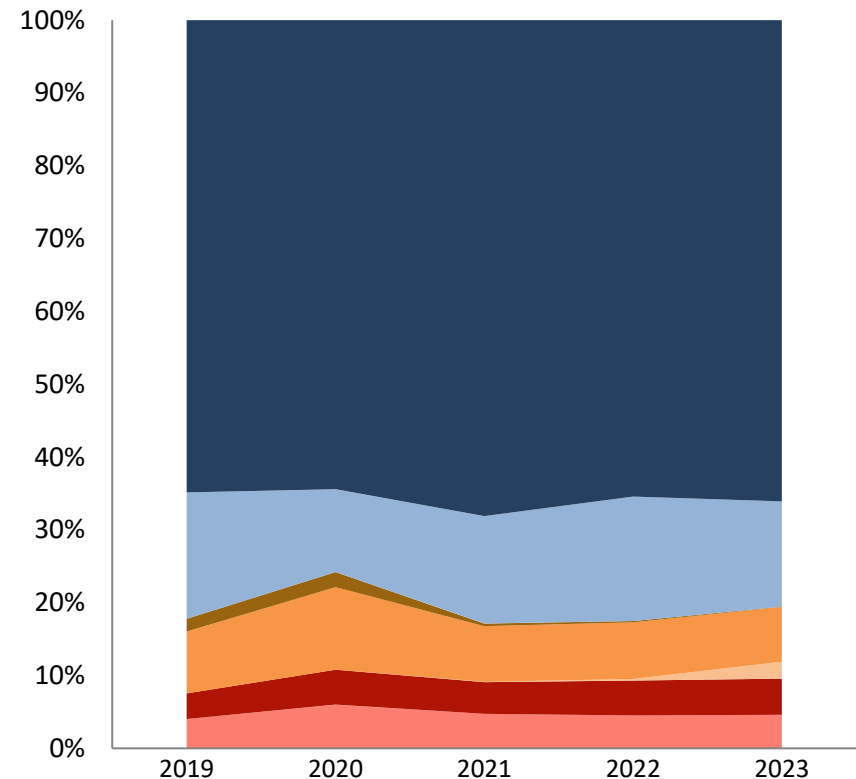
Over the 5-year period your costs decreased by 10.6bps from 61.6bps in 2019 to 51.0bps in 2023. This decrease was more than the 4.8bps predicted by your asset mix changes.

All other things being equal, changes in your asset mix influence your total cost. If you invest more in higher cost assets, particularly private assets, your costs increase (and vice versa).

Asset classes that tend to have lower costs are denoted in blue and asset classes that tend to have higher cost assets are denoted in red colours.

The asset mix impact is the predicted change of your costs based on asset mix alone. It assumes that what you paid for each mandate and how you implemented your strategy was unchanged from the baseline year.

5-year trend in your actual asset mix



■ Equities	65%	64%	68%	65%	66%
■ Bonds	17%	11%	15%	17%	14%
■ Hedge funds & multi-asset	2%	2%	0%	0%	0%
■ Property	9%	11%	8%	8%	8%
■ Infrastructure	0%	0%	0%	0%	2%
■ Private equity	4%	5%	4%	5%	5%
■ Private debt	4%	6%	5%	5%	5%
■ Derivatives/Overlays	0%	0%	0%	0%	0%

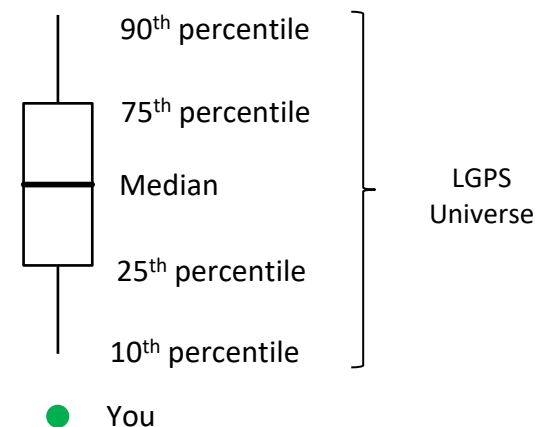
We compare your investment returns to CEM's LGPS universe.

Costs need to be seen in context so we consider relative performance to help better understand cost. The investment performance comparisons are with CEM's LGPS universe, which currently comprises 34 funds with total assets of £258 billion (average £8 billion, median £6 billion).

Pool / Group	Participating funds
Access	Cambridgeshire, Essex, Hampshire County Council, Isle of Wight, Kent, Northamptonshire, Suffolk.
BCPP	Cumbria, Durham, East Riding, Lincolnshire, NYPF, SYPF, Surrey, Teesside, Tyne and Wear, Warwickshire.
Central	Cheshire, Staffordshire, West Midlands, Worcestershire.
London	London Borough of Sutton Pension Fund.
LPP	Berkshire Pension Fund, Lancashire, LPFA.
Northern	GMPF, Merseyside, West Yorkshire.
Northern Ireland	NILGOSC.
Scotland	Falkirk, Fife, Lothian, Scottish Borders, Strathclyde.

Key:

'Bar and whisker' graphs are used to show how you compare with other LGPS funds:



The number of participant funds will increase over time, as other funds submit their data.

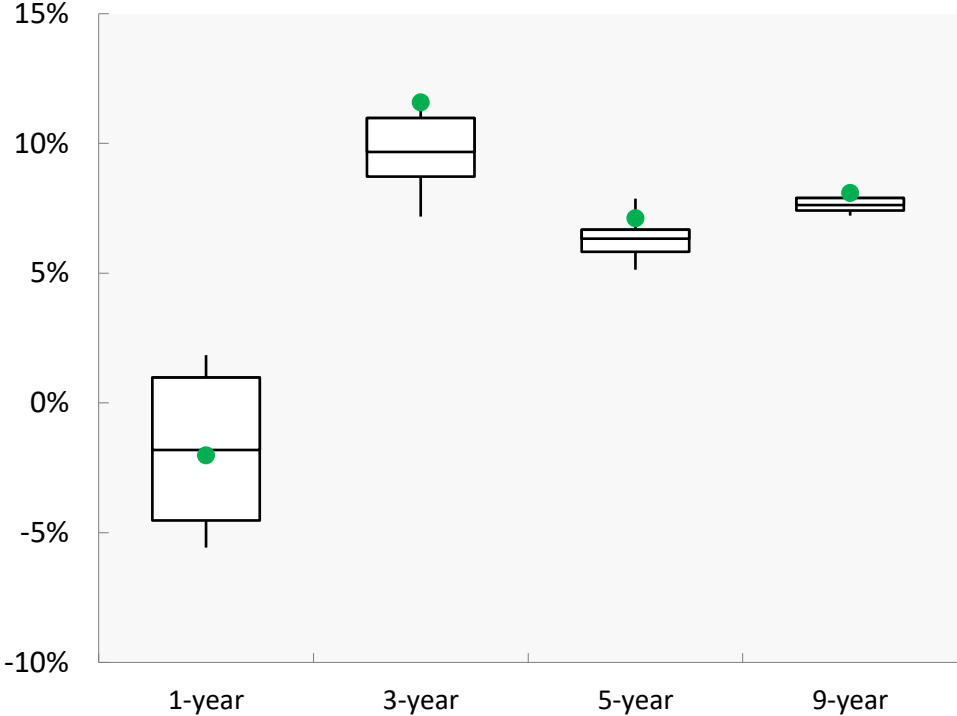
Your performance numbers will be compared against the LGPS universe over a 1, 3, 5 and 9-year periods. We are showing a 9-year time horizon as this aligns with DLUHC's baseline requirements.

Your 5-year net total return of 7.1% was above the LGPS median of 6.3%.

In the pages that follow, we help you to understand why your returns compare as they do by separating total return into its more meaningful components:

- *Benchmark return* : The return from strategic asset allocation decisions. These decisions are typically made by the local Pensions Committee.
- *Value added* : A function of active management decisions, including tactical asset allocation, manager selection, stock selection, etc. These 'implementation' decisions tend to be made by management.

LGPS net total returns - quartile rankings



Q3	1.0	11.0	6.7	7.9
Median	-1.8	9.7	6.3	7.6
Q1	-4.5	8.7	5.8	7.4
Your fund	-2.0	11.6	7.1	8.1
LGPS %ile	42%	92%	86%	84%

Your 5-year benchmark return of 6.5% was above the LGPS median of 5.7%.

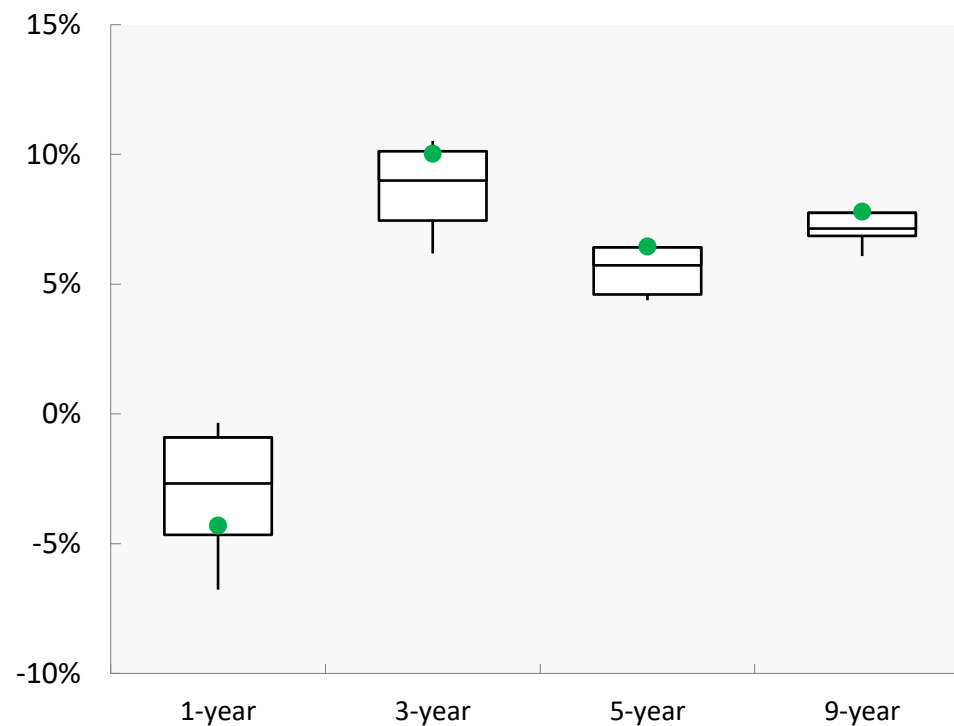
The benchmark return is the return you could have earned by implementing your strategy passively, i.e., by indexing your portfolio in line with your strategic asset allocation.

You have selected a strategic asset allocation based on your funding position, long-term market expectations, liabilities, employer covenant and appetite for risk.

These factors are different in each fund and it is unsurprising that benchmark returns (and total returns) often vary widely.

Appendix 7 looks at how your strategic asset allocation and choice of benchmarks compare with other LGPS funds.

LGPS benchmark returns - quartile rankings



Q3	-0.9	10.1	6.4	7.8
Median	-2.7	9.0	5.7	7.1
Q1	-4.7	7.4	4.6	6.9
Your fund	-4.3	10.0	6.5	7.8
LGPS %ile	30%	68%	81%	84%

Your 5-year net value added (NVA) of 0.7% was slightly below the LGPS median of 0.8%.

NVA equals total net return minus benchmark return. It is a function of active management decisions made in the implementation of your strategy including tactical asset allocation, manager selection, stock selection, hedging, etc. If the NVA is positive, then value is being created and active management decisions are being rewarded.

The NVA from the pool reflects aggregate net returns on pooled sub-funds minus the benchmark returns for those sub-funds. The total fund NVA and the NVA from the pool should not be directly compared. Pooled assets are only part of the total fund and some assets will generate a higher NVA than others.

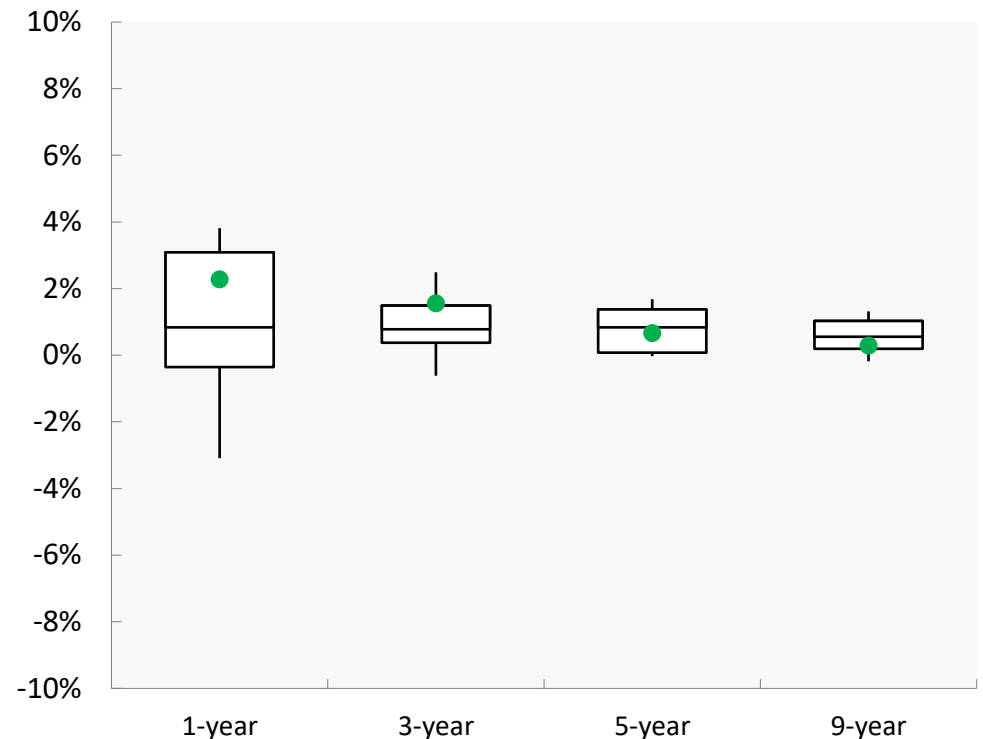
Total Fund assets:

Year	Assets (£m)	NVA (%)	Approx. NVA (£m)
2019	4,946	(0.0)	(0)
2020	4,672	(1.0)	(49)
2021	6,125	2.1	131
2022	6,533	0.2	11
2023	7,049	2.3	161
Total		0.7	253

Pooled assets:

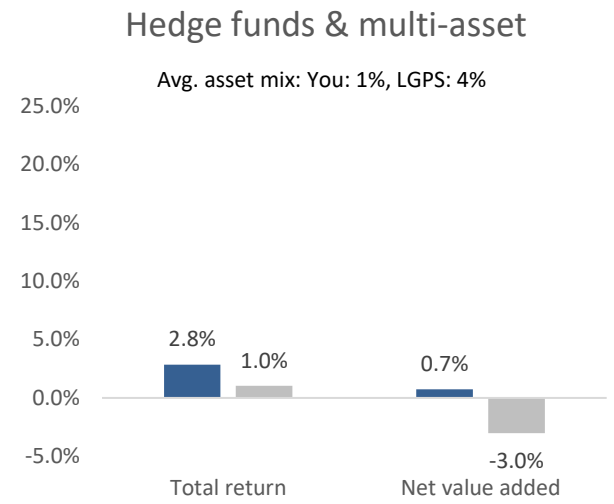
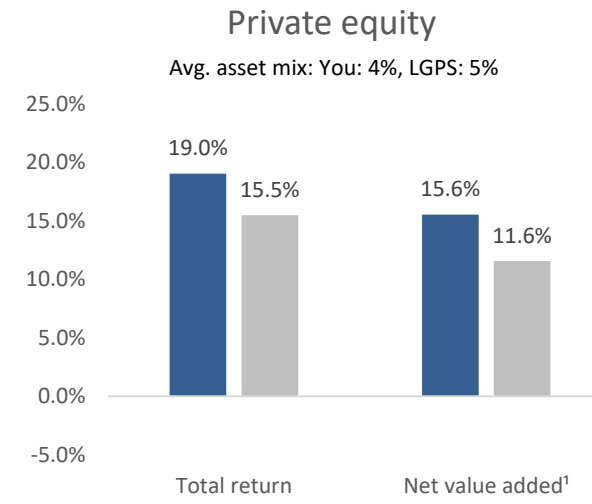
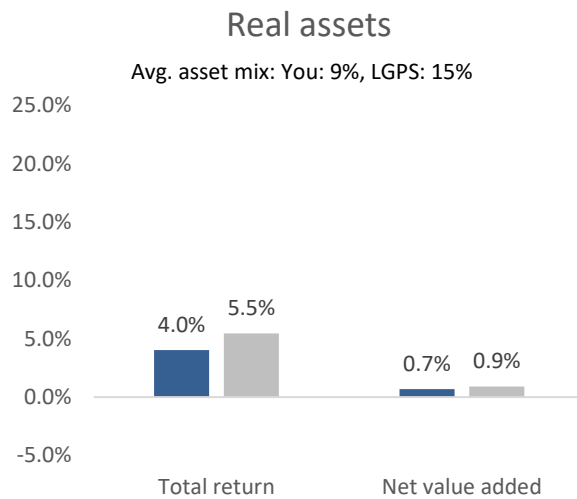
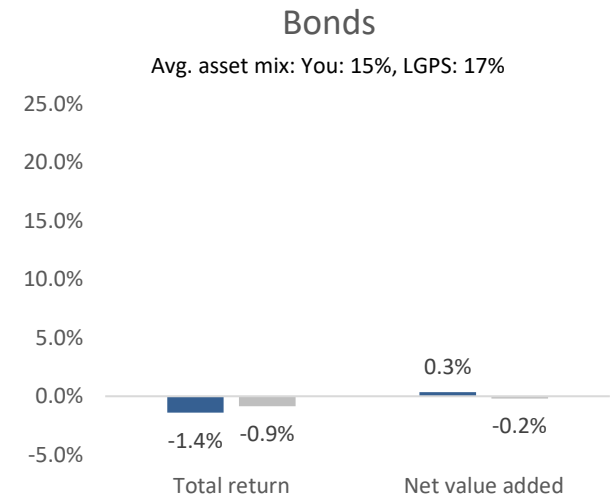
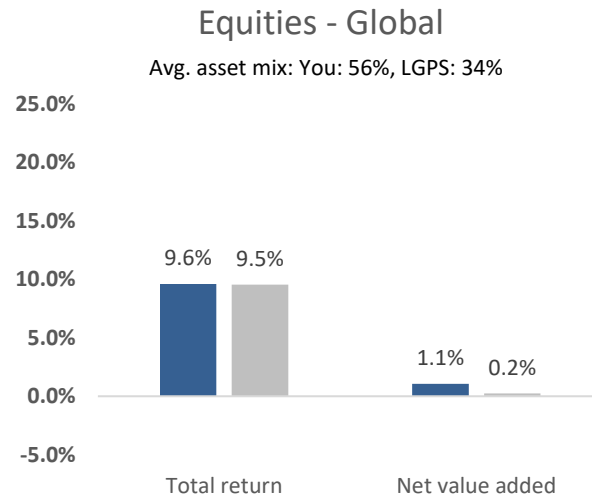
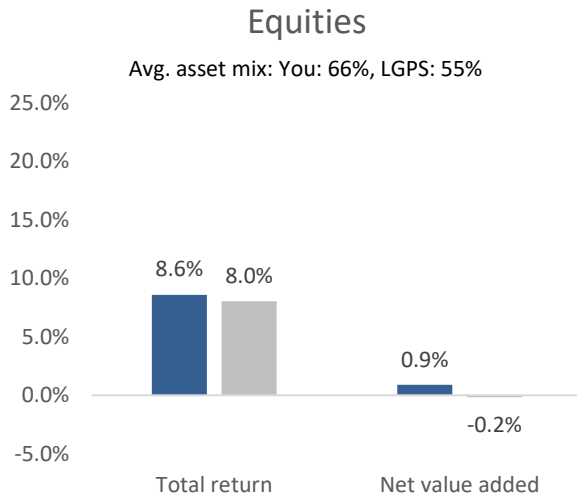
Year	Assets (£m)	NVA (%)	Approx. pool NVA (£m) ²
2020	1,149	(8.9)	(75)
2021	1,230	5.9	65
2022	1,327	0.0	0
2023	1,523	0.7	9
Total			(0)³

LGPS net value added¹ - quartile rankings



Q3	3.1	1.5	1.4	1.0
Median	0.8	0.8	0.8	0.6
Q1	-0.4	0.4	0.1	0.2
Your fund	2.3	1.6	0.7	0.3
LGPS %ile	67%	76%	43%	32%

5-year average net returns and net value added by major asset class.



■ You ■ LGPS

Your pooled sub-funds relative costs and their performance relative to the universe.

Sub-funds	Avg. AUM £m	Total impact 2022		1-year net return			1-year NVA			3-year net return			3-year NVA		
		Fees ex. private & HF perf fees (bps)	Private & HF perf. fees (bps)	Your (%)	Univ. Avg. (%)	Rank vs. Univ.		Your (%)	Univ. Avg. (%)	Rank vs. Univ.		Your (%)	Univ. Avg. (%)	Rank vs. Univ.	
						Low	High			Low	High			Low	High
Global Equity Active Multi Manager Fund	731	(15.2)		1.4	(2.8)	■ ■ ■ ■ ■	2.2	(0.3)	■ ■ ■ ■ ■	19.2	14.7	■ ■ ■ ■ ■	3.2	(0.2)	■ ■ ■ ■ ■
Corporate Bonds	415	4.8		(10.8)	1.6	■ ■ ■ ■ ■	(1.9)	1.6	■ ■ ■ ■ ■	(2.0)	1.6	■ ■ ■ ■ ■	(0.2)	2.1	■ ■ ■ ■ ■
Factor Based Equities	244	3.1		0.9	(2.8)	■ ■ ■ ■ ■	0.3	(0.3)	■ ■ ■ ■ ■	5.1	14.7	■ ■ ■ ■ ■	n/a	(0.2)	
Single Asset (JPM)	60	(12.0)	(14.7)	(0.1)	4.1	■ ■ ■ ■ ■	n/a ¹	5.4	■ ■ ■ ■ ■	n/a	5.7	■ ■ ■ ■ ■	n/a ¹	2.4	■ ■ ■ ■ ■
Credit Partnership I LP, II LP & IV LP	29	29.1	106.3	65.1	7.9	■ ■ ■ ■ ■	n/a ¹	4.6	■ ■ ■ ■ ■	n/a	11.9	■ ■ ■ ■ ■	n/a ¹	3.8	■ ■ ■ ■ ■
Targeted Sustainable Equities	21	(3.1)		1.9	(2.8)	■ ■ ■ ■ ■	n/a	(0.3)	■ ■ ■ ■ ■	n/a	14.7	■ ■ ■ ■ ■	n/a	(0.2)	
Infrastructure SubFund Core/Plus	16	60.4	165.3	n/a	4.1	■ ■ ■ ■ ■	n/a ¹	5.4	■ ■ ■ ■ ■	n/a	5.7	■ ■ ■ ■ ■	n/a ¹	2.4	■ ■ ■ ■ ■
Private Equity 2018 & 2021	8	7.6	94.7	3.4	1.7	■ ■ ■ ■ ■	n/a ¹	16.8	■ ■ ■ ■ ■	20.3	15.6	■ ■ ■ ■ ■	n/a ¹	9.9	■ ■ ■ ■ ■

Total impact is the combination of both strategy and structure impacts, in bps, as shown on page 6.

In the 'Rank' graphic, one colored square (Low) is a percentile ranking of 0% to 10%, two squares is 10.1% to 25%, three squares is 25.1% to 75%, 4 squares is 75.1% to 90%, and 5 squares (High) is 90.1% to 100%. Highlighting is not applied if there are fewer than 5 observations.

Your strategic asset mix is largely a function of your appetite for risk.

It is interesting and helpful to compare the overall expected level of volatility in your portfolio. Each fund has its own risk model, but we calculate risk on a standard basis in order to compare funds. It is your position relative to others that is helpful.

- Asset risk - A higher asset risk is indicative of a higher weighting to more volatile assets and/or more concentration in the portfolio (and vice-versa). Your asset risk of 11.3% was above the LGPS median of 10.7%.
- Asset-liability mismatch risk - A lower asset-liability mismatch risk means you are closer to a 'fully-matched' position. A higher asset-liability mismatch risk is indicative of a willingness to take more risk relative to liabilities. Your asset-liability risk of 11.4% was above the LGPS median of 10.7%.

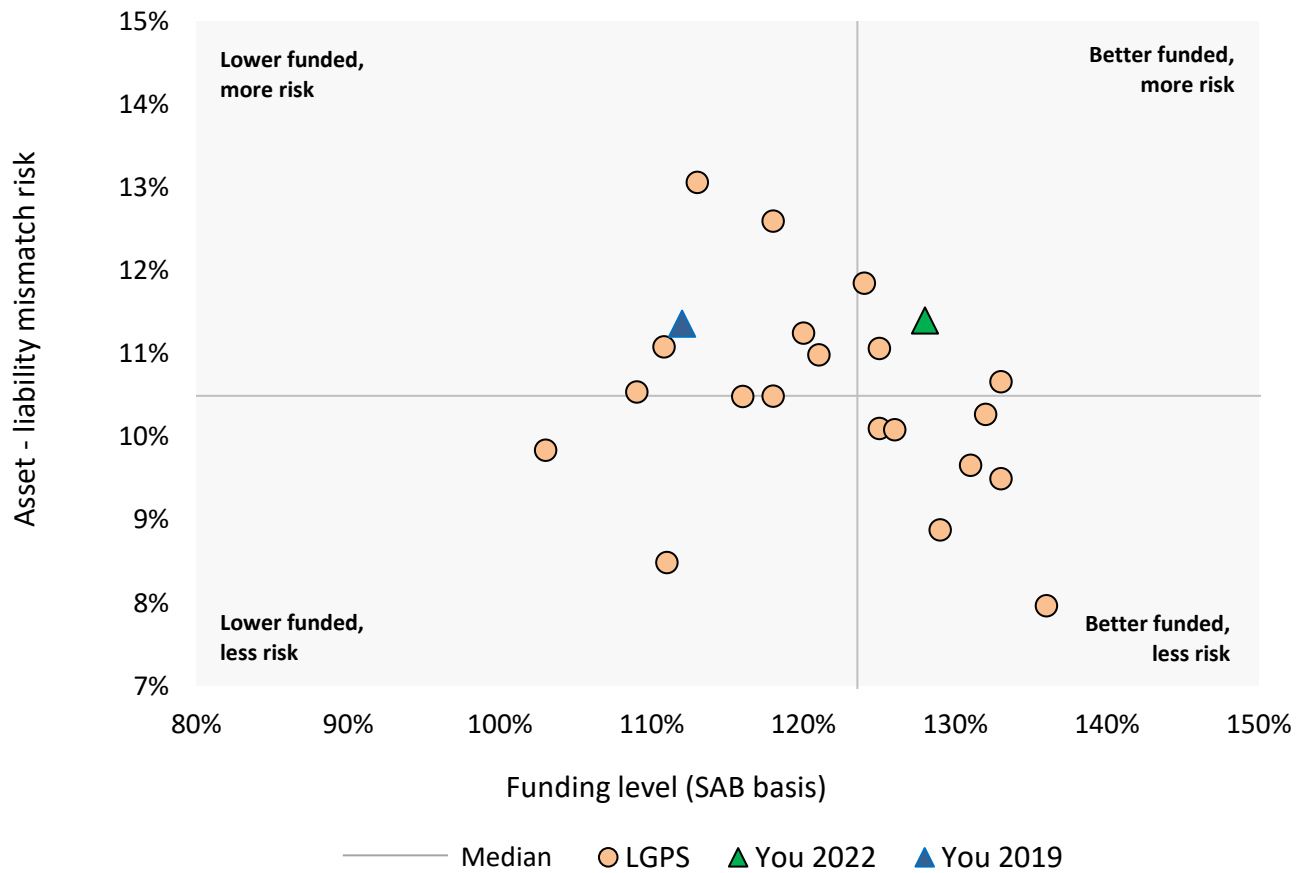
LGPS risk levels at 31st March 2023



Your funding level on the standard SAB basis¹ in 2022 was 128%.

Your funding level on the standard SAB basis in 2022 was above the LGPS median of 124%. You had more asset liability mismatch risk than other LGPS funds. Your SAB basis funding level in 2019 was 112%. We use the standard SAB basis because it helps us to compare relative funding levels, eliminating most of the noise of different actuarial assumptions.

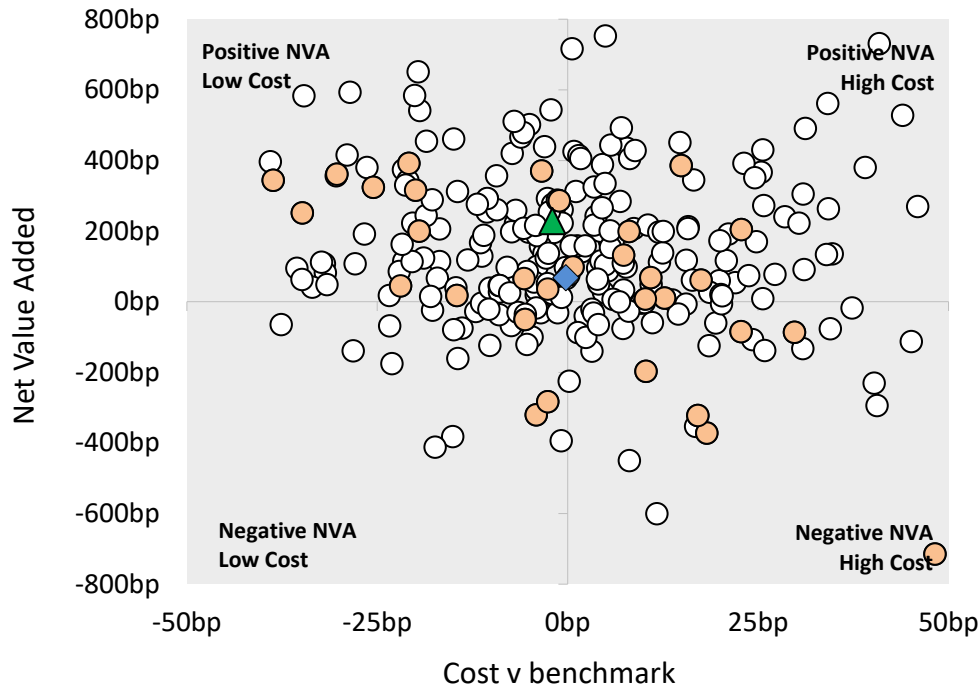
LGPS funding levels (SAB basis) vs asset-liability mismatch risk



Value-for-Money (VfM).

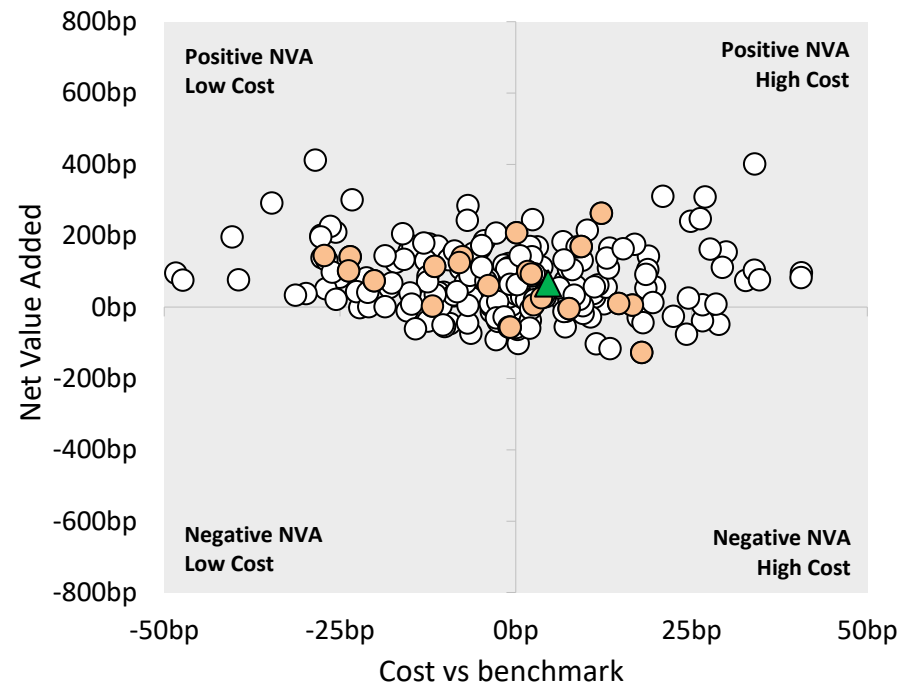
Your 2023 performance placed in the positive value added, low cost quadrant of the VfM chart.

(Your 2022/23: net value added 228.0 bps, cost savings 2.0 bps)



Your 5-year performance placed in the positive value added, high cost quadrant of the VfM chart.

(Your 5-year: net value added 66.2 bps, cost 4.6 bps)



● LGPS	○ Global	▲ You	◆ Pooled assets
--------------------------------------------	---------------------------------------------	------------------------------------------	---------------------------------------------------

	2023	2022	2021	2020	2019	5-year
Total						
Net value added (bps)	228.0	16.7	213.6	(104.1)	(0.7)	66.2
Your relative cost (bps)	(2.0)	5.6	5.8	6.7	6.9	4.6
LGPS Pool						
Net value added (bps)	68.2	TBD	TBD	TBD	TBD	
Your relative cost (bps)	(0.3)	--	--	--	--	

Key takeaways

Cost

- Your investment cost of 51.0 bps was below your benchmark cost of 53.0 bps.
- In aggregate, you had a higher cost implementation style.
- In aggregate, you paid less than peers for similar assets.
- Your pooled assets saved you 0.3 bps relative to peers.

Cost trend

- Your costs fell from 61.6 bps in 2018/19.

Returns

- Your 5-year net total return was 7.1%. This was above the LGPS median of 6.3%.
- Your 5-year benchmark return was 6.5%. This was above the LGPS median of 5.7%.

Funding and Risk

- Your funding level of 128% on the standard SAB basis in 2022 was above the LGPS median of 124%.
- Your strategic asset allocation suggests that you take more risk relative to your liabilities than LGPS peers.

Value added

- Your 5-year net value added was 0.7%. The LGPS median was 0.8%.
- Your cumulative 5-year net value added has added £253 million to the funding of your plan.

Cost effectiveness / value-for-money

- Your 5-year performance placed in the positive value added, high cost quadrant of the VfM chart.

Appendix 1: Your peer group.

Your peer group is comprised of 41 global funds including 7 LGPS funds ranging in size from 4.6bn to 11.2bn. The median size in the peer group is £7.3 bn (versus your average assets of £7.0 bn).

Global peers

American Airlines, Inc
Canadian National
Caterpillar Inc.
Chevron Corporation
Citigroup
Colleges of Applied Arts and Technology
Corteva, Inc.
Deere & Co
District of Columbia Retirement Board
Dominion Energy, Inc.
Dow Chemical Company
Eli Lilly and Company
ExxonMobil Corporation
Healthcare Employees - Manitoba
Houston Police Officers Pension System
Huntington Ingalls Industries, Inc.
ILWU-PMA Pension Fund
International Paper
Merck & Co., Inc.
MetLife
Missouri State Employees' Ret. Sys.
N.S. Association of Health Organizations
NRECA
PepsiCo Inc.
Prudential Financial Inc.
Régime de rentes du Mouvement Desjardins
San Diego City ERS
Saskatchewan Healthcare Employees'
Saskatchewan Public Employees Pension Fund
BPF voor de Media PNO
SPF Werk en (re)Integratie
Textron Inc.
WCB-Alberta
Wells Fargo & Company

LGPS Peers

Essex Pension Fund
London Pension Funds Authority
Lothian Pension Fund
Merseyside Pension Fund
NILGOSC
South Yorkshire Pensions Fund
Staffordshire Pension Fund

Appendix 9: Notes.

Page	Note
4	<ol style="list-style-type: none">1. Your internal costs reflect the cost of managing assets internally (either yourself or at a pooled level).2. Your costs include any underlying manager base and performance fees for any of your fund of funds mandates.3. Transaction costs should not be regarded as complete. They are shown only where provided. We specifically exclude transaction costs from the benchmarking analysis because of concerns over the consistency and validity of data. We hope to include transaction costs in future years.4. Other expenses include fund administration, governance, compliance, distribution and communication costs captured from CTI templates.5. Benchmarked investment costs exclude pension administration costs and non-investment related governance and oversight costs.6. Your 2022/23 financial statements report investment costs of £18.69 million. The costs benchmarked here are different. This is likely because of differences in standard definitions, and/or estimations of costs in financial statements.
6	<ol style="list-style-type: none">1. For external property, infrastructure, natural resources and private equity/credit investments the fee basis is usually the committed amount during the commitment period and unreturned invested capital (i.e., book cost) afterward. Unreturned invested capital equals contributed capital less contributed capital attributable to realized investments plus the aggregate amount of write-downs, if any, with respect to unrealized investments. If this has not been provided the default will be based on NAV. This is only applicable to manager base fees.
7	<ol style="list-style-type: none">1. For external property, infrastructure, natural resources and private equity/credit investments the fee basis is usually the committed amount during the commitment period and unreturned invested capital (i.e., book cost) afterward. Unreturned invested capital equals contributed capital less contributed capital attributable to realized investments plus the aggregate amount of write-downs, if any, with respect to unrealized investments. If this has not been provided the default will be based on NAV. This is only applicable to manager base fees.2. Includes the underlying manager base and performance fees for both benchmark items and impacts.
13	<ol style="list-style-type: none">1. To enable fairer comparisons, the value added for each participant, except your fund, was adjusted to reflect private equity benchmarks based on lagged, investable, public-market indices. If CEM used this same adjustment for your fund, your 5-year total fund value added would have been 0.0% lower.2. The calculation of the approximate pool net value added is in appendix 8.3. Total includes public mandates where LGPS Central benchmarks were available.
14	<ol style="list-style-type: none">1. To enable fairer comparisons, the private equity benchmarks of all participants, except your fund, were adjusted to reflect lagged, investable, public-market indices. If CEM used this same adjustment for your fund, your fund's 9-year private equity net value added would have been 15.1%.
15	<ol style="list-style-type: none">1. LGPS Central benchmarks for private mandates are not yet available.
16	<ol style="list-style-type: none">1. Asset risk is the standard deviation of your benchmark return. It is based on the historical variance of, and covariance between, the asset classes in your strategic asset allocation.2. Asset-liability mismatch risk is the standard deviation of funded status caused by market factors. It is a function of the standard deviations of your asset risk, your marked-to-market liabilities and the correlation between the two.

Appendix 9: Notes.

Page	Note
17	<ol style="list-style-type: none">1. The funding level is based on standardised actuarial assumptions developed for the Scheme Advisory Board (SAB). Most of the key assumptions are consistent across funds but some assumptions, and in particular mortality assumptions, are fund specific. The standard basis serves a useful purpose in providing context for comparisons of asset risk and asset-liability mismatch risk.2. Your funding level, on the regular basis prescribed by your own actuary in 2019 was 99%, i.e., the SAB basis is less prudent than your regular basis. The median funding level for participating LGPS funds on their regular basis was 124%.