Lincolnshire Pension Fund

Data quality report as at 31 March 2022

Introduction

The purpose of this document is to provide a summary of the data quality of the membership data submission named BW 2022 final data and dated 31 March 2022 in respect of Lincolnshire Pension Fund (the Fund). The data quality has been measured taking into consideration the checks that we would carry out for an actuarial valuation only and **should not** be used as a measure of data quality with respect to the Pension Regulator's requirements.

This report is provided to West Yorkshire Pension Fund as administering authority to the Fund. The Fund is part of the Local Government Pension Scheme (LGPS). The report has been generated directly from our online LGPS Data Checker which is available to the administering authority as a data cleansing resource. The report may be shared with the employers participating in the Fund but it does not constitute advice to them.

Checking process

The data has been uploaded to the online data checker by the administering authority in the universal data capture (UDC) format agreed by the LGPS software providers and Fund Actuaries as being suitable for actuarial valuation purposes, and confirmed as being a submission relating to the whole Fund. A number of automatic checks were then carried out which assessed the data for reasonableness as well as consistency with the previous base membership data dated 31 March 2022. The checks are split into three different levels depending on their significance.

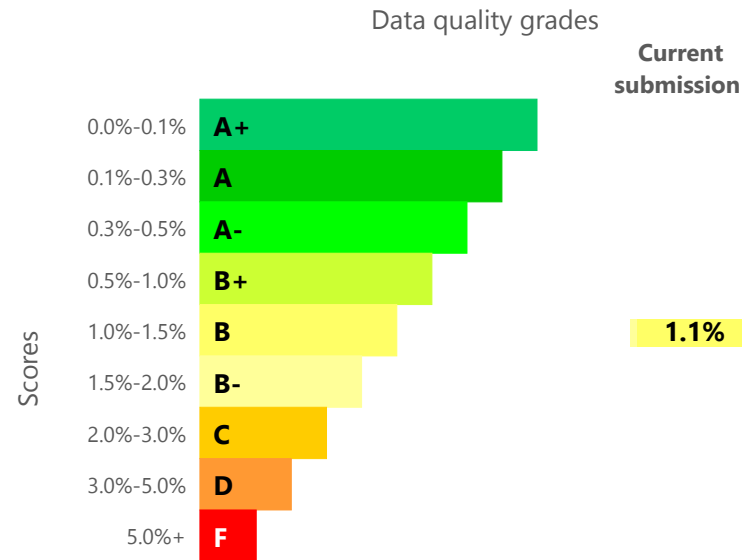| Level 1	Level 2	Level 3
• Potential problems that directly affect our ability to value members accurately • Examples include missing date of birth, or potentially incorrect salary information	• Less important issues for which reasonable estimates can be made if necessary • For example, checking the Critical Retirement Date is within a reasonable range.	• Minor issues which are flagged for completeness • For example, missing spouse pension for active members

Appendix B

Results

The main indicator we use for data quality is the **failure percentage**, which is the ratio of the number of checks which failed the tests to the total number of checks run - the lower the failure percentage the higher the perceived quality of the data. The failure percentages are determined separately for each extract type (active, deferred, undecided, pensioner, and dependant) and check level (1, 2, and 3). From this we calculate a combined **data quality grade** for the whole membership data submission. The grade takes the relative importance levels of the different checks into account. The individual failure percentages for the whole submission can be found in Appendix 1 and details on how the score is calculated can be found in Appendix 2.

Grade results and comments

Our data quality score ranges from A+ to F with a higher grade indicating a higher quality of the data, as shown in the graph to the right. The current submission has an overall data grade of **B**.

Data quality grades

Current submission

Scores

0.0%-0.1%	A+	
0.1%-0.3%	A	
0.3%-0.5%	A-	
0.5%-1.0%	B+	
1.0%-1.5%	B	**1.1%**
1.5%-2.0%	B-	
2.0%-3.0%	C	
3.0%-5.0%	D	
5.0%+	F	

Main data issues

In order to help identify the main issues with the submission, we have listed checks below that were failed in significant proportions. For the purposes of the review, we have considered all level 1 checks that were failed in more than 5.0% of cases and all level 2 checks that were failed in more than 10.0% of cases. We have not considered any level 3 checks as these are considered to be minor.

Note that not all checks are run for all members in a particular status. For example, checks on Full-Time Equivalent (FTE) salaries are only carried out for currently active members who joined the LGPS prior to 1 April 2014. In addition, some checks are not run if a member fails a particular check. For example, if FTE is missing in an active member's record then we do not carry out any further checks on FTE.

Check Name	Data item	Member Status	Importance level	Number of failures	% of cases failed
Pensionable pay (50:50) exists (if relevant)	Pensionable Pay 50:50 (LGPS 2014 Definition)	Act	1	32	46.4%
Final salary pension (65) is within £1k of expected value	Revalued Age 65 pre 2014 Pension (£ p.a.)	Act	2	144	18.0%
Pensionable pay (2014) exists	Pensionable Pay (LGPS 2014 Definition)	Act	1	3,382	15.5%
Date of pensionable pay (2014) is after last valuation date	Date of Pay (LGPS 2014 Definition)	Act	1	3,217	14.7%
Date of CARE pot is after last 31 March	Date accrued CARE Pension Pot (£) revalued to	Act	1	3,462	14.4%
Final salary lump sum (CRA) is within £5k of expected value	Revalued Lump Sum (£) Payable at CRA	Act	2	36	12.0%
Child member is aged between 0 and 25	Date Of Birth	Dep	1	16	10.2%

A comprehensive list of the number of records failing each check can be found within the submission on the LGPS Data Checker.

Employer summary

The submission included a total of 213 Fund employers. Of these employers, 20 have a data quality grade of D or below. The contribution of the data scores over the whole submission is visualised in the graph below.

Employer data quality grades

A+	A	A-	B+	B	B-	C	D	F
8.9%	2.3%	6.1%	13.1%	20.7%	22.1%	17.4%	6.6%	2.8%
19	5	13	28	44	47	37	14	6

Employers with low measured data quality

Below we have listed the employers with a measured data quality grade D or below.

Employer Name	Employer Code	Number of checks run	Weighted average failure percentage	Data quality grade
Easy Clean Contractors (Linchfield)	P20043	36	9.1%	F
Carlton Cleaning	P20066	42	8.7%	F
Friskney All Saints CofE Primary Academy	P40193	1006	5.7%	F
Surfleet Primary Academy	P40190	790	5.2%	F
Gedney Church End Primary Academy	P40200	841	5.2%	F
Taylor Shaw (Branston Academy)	P20038	89	5.0%	F
Branston C of E Infants School	P40148	1048	3.9%	D
Caterlink (Walton Girls School)	P20058	306	3.8%	D
Lincoln Anglican Academy Trust	P40114	1562	3.8%	D
Caterlink (David Ross Education Trust)	P20062	235	3.8%	D
Infinity Academies Trust (Head Office)	P40203	134	3.7%	D
Mercer's Wood Academy	L0736	7070	3.6%	D
Washingborough Academy	L0703	2767	3.4%	D
St Michaels Church of England Primary School	P40156	3077	3.3%	D
Anthem Schools Trust	P40205	232	3.2%	D

Employer Name	Employer Code	Number of checks run	Weighted average failure percentage	Data quality grade
Kirkby la Thorpe CofE Primary Academy	L0527	1907	3.2%	D
Lincoln Our Lady of Lincoln Catholic Primary School	L0516	21322	3.1%	D
Lincoln Westgate Academy	L0884	3655	3.1%	D
Lutton St Nicholas Primary School	P40201	1274	3.0%	D
St Nicholas CoE Primary School	P40169	1421	3.0%	D

A comprehensive ranking of the employers for the individual extracts can be found within the submission on the LGPS Data Checker.

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Appendix 1   Failure summary

The following table shows a summary of the checks carried out, the checks failed and the resulting failure percentage split by extract type and check level.

Extract type		Level 1	Level 2	Level 3	Total
Active	Checks run	638,439	453,482	77,878	**1,169,799**
	Checks failed	10,492	2,773	17,559	**30,824**
	Failure percentage	1.6%	0.6%	22.5%	**2.6%**
Deferred	Checks run	521,444	379,316	83,797	**984,557**
	Checks failed	24	1,069	32	**1,125**
	Failure percentage	0.0%	0.3%	0.0%	**0.1%**
Undecided	Checks run	37,976	9,870	0	**47,846**
	Checks failed	0	255	0	**255**
	Failure percentage	0.0%	2.6%	0.0%	**0.5%**
Pensioner	Checks run	325,913	144,252	49,668	**519,833**
	Checks failed	164	365	10	**539**
	Failure percentage	0.1%	0.3%	0.0%	**0.1%**
Dependent	Checks run	39,338	18,227	3,413	**60,978**
	Checks failed	14	18	0	**32**
	Failure percentage	0.0%	0.1%	0.0%	**0.1%**
Total	**Checks run**	**1,563,110**	**1,005,147**	**214,756**	**2,783,013**
	Checks failed	**10,694**	**4,480**	**17,601**	**32,775**
	Failure percentage	**0.7%**	**0.4%**	**8.2%**	**1.2%**

Appendix 2   Determination of data quality grade

The grade is based on the weighted average failure percentages across all statuses and levels as shown in Appendix 1 and broken down below. The weights used take the amount of checks run for each extract and the relative importance of each of the check levels into account

	Weights by checks run	Level 1	Level 2	Level 3
Weights by level		**70%**	**25%**	**5%**
Active	**42.0%**	29.4%	10.5%	2.1%
Deferred	**35.4%**	24.8%	8.8%	1.8%
Undecided	**1.7%**	1.2%	0.4%	0.1%
Pensioner	**18.7%**	13.1%	4.7%	0.9%
Dependent	**2.2%**	1.5%	0.5%	0.1%

Applying these weights leads to a weighted average failure percentage of **1.1%**. This has been translated into a grade **B** as shown in the chart below.

Weighted failure %s	0.0% - 0.1%	0.1% - 0.3%	0.3% - 0.5%	0.5% - 1.0%	1.0% - 1.5%	1.5% - 2.0%	2.0% - 3.0%	3.0% - 5.0%	5.0% - 100.0%
Data grade	A+	A	A-	B+	B	B-	C	D	F

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