Report on the Actuarial Valuation as at 31 March 2020

Aberdeen City Council Transport Fund

March 2021

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Introduction

This report is addressed to the Administering Authority of the Aberdeen City Council Transport Fund ("the Administering Authority") and is provided to meet the requirements of Regulation 60 of the Local Government Pension Scheme (Scotland) Regulations 2018 (as amended) ("the Regulations"). It describes the factors considered by the Administering Authority when carrying out the actuarial valuation as at 31 March 2020 and the decisions reached as a result.

The purpose of the actuarial valuation is for the Administering Authority to determine:

1. The expected cost of providing the benefits built up by members at the valuation date (the 'liabilities'), and compare this against the funds held by the Fund (the 'assets').

2. The contributions needed to cover the cost of the benefits that active members will build up in the future and other costs incurred in running the Fund (the 'Primary Contribution Rate').

3. An appropriate plan for making up the shortfall if the Fund has less assets than liabilities or refunding the surplus if the Fund has more assets than liabilities. This plan will cover the amounts which will need to be paid (the 'Secondary Contribution Rate') and the timeframe over which they will be paid ('the Spread Period').

Signature		
Name	Paul Middleman	Laura Evans
Qualification	Fellow of the Institute and Faculty of Actuaries	Fellow of the Institute and Faculty of Actuaries
Date	29 March 2021	

This report uses various technical terms. These are explained in more detail in the explanatory boxes which appear throughout this report, and in the Glossary at Appendix H.

This report has been prepared in accordance with Technical Actuarial Standards TAS 100: Principles for Technical Actuarial Work and TAS 300: Pensions which are issued by the Financial Reporting Council. The calculations referred to in the report use methods and assumptions appropriate for reviewing the financial position of the Fund and determining a contribution rate for the future. Mercer does not accept liability to any third party in respect of this report; nor do we accept liability to the Administering Authority if the information provided in this report is used for any purpose other than that stated. The report may be disclosed to members and others who have a statutory right to see it. It may also be disclosed to any participating employer and, if the Administering Authority and Mercer consent, it may be disclosed to other third parties.

1

Funding Strategy – Key Elements

Fundamental to the valuation results is the funding strategy adopted by the Fund. This funding strategy is set out in a specific document (the Funding Strategy Statement or FSS for short) which is one of the Administering Authority's key governance documents for the Fund. In essence, the FSS sets out an overview of the approach to be used for the actuarial valuation. Amongst other things it outlines the assumptions, both economic and demographic, to be used in calculating the value of the liabilities built up, the contributions required to correct any funding shortfall or surplus, and the contribution rate required to fund the benefits for future service. It also sets out the strategy for making good any funding shortfall, in particular how any shortfall is expected to be financed in terms of the balance between future contributions and future investment returns, and the period over which any surplus or shortfall is expected to be recovered.

The FSS is the Administering Authority's key governance document in relation to the actuarial valuation. It sets out the funding policies adopted, the actuarial assumptions used, and the timescales over which deficits will be paid off. Employers are consulted about the FSS as part of the actuarial valuation process.

The principal elements of the funding strategy adopted for this actuarial valuation are as follows:

- The McCloud judgment (see Appendix D for details) – the valuation results as set out in Section 2 of this report include an allowance in relation to the potential cost of the McCloud judgment. An estimate of the effect of the judgment, based on the proposed remedy in the consultation launched in July 2020 for the Whole Fund is shown at the end of that section. Each employer has been notified of the estimate of the potential cost of the proposed remedy which has been included in their liabilities (expected to be minimal for both employers) and the additional contributions over 2021/24 in respect of this. For simplicity, although the proposed remedy would lead to the underpin no longer applying to accrual post 31 March 2022, the estimated cost of future accrual up to that point has been spread over the three years of the certification period i.e. 1 April 2021 – 31 March 2024.

The "McCloud judgment" refers to the legal decisions in the Sargeant/McCloud cases for the Fire and Judiciary pension arrangements. The courts ruled that the transitional protections afforded to older members when these schemes were amended constituted unlawful age discrimination. Remedial action, in the form of benefit changes for these schemes, will therefore be required. Although the above cases did not relate directly to the LGPS, the UK Government has accepted that remedies will need to apply to all the public service pension schemes, including the LGPS. For the LGPS the transitional protections took the form of an underpin, where older members got the better of the benefits payable under the new and old schemes. At this stage it seems likely that the remedy will be to extend this underpin to younger members (see Appendix D for more details), and we have allowed for this in our calculations.

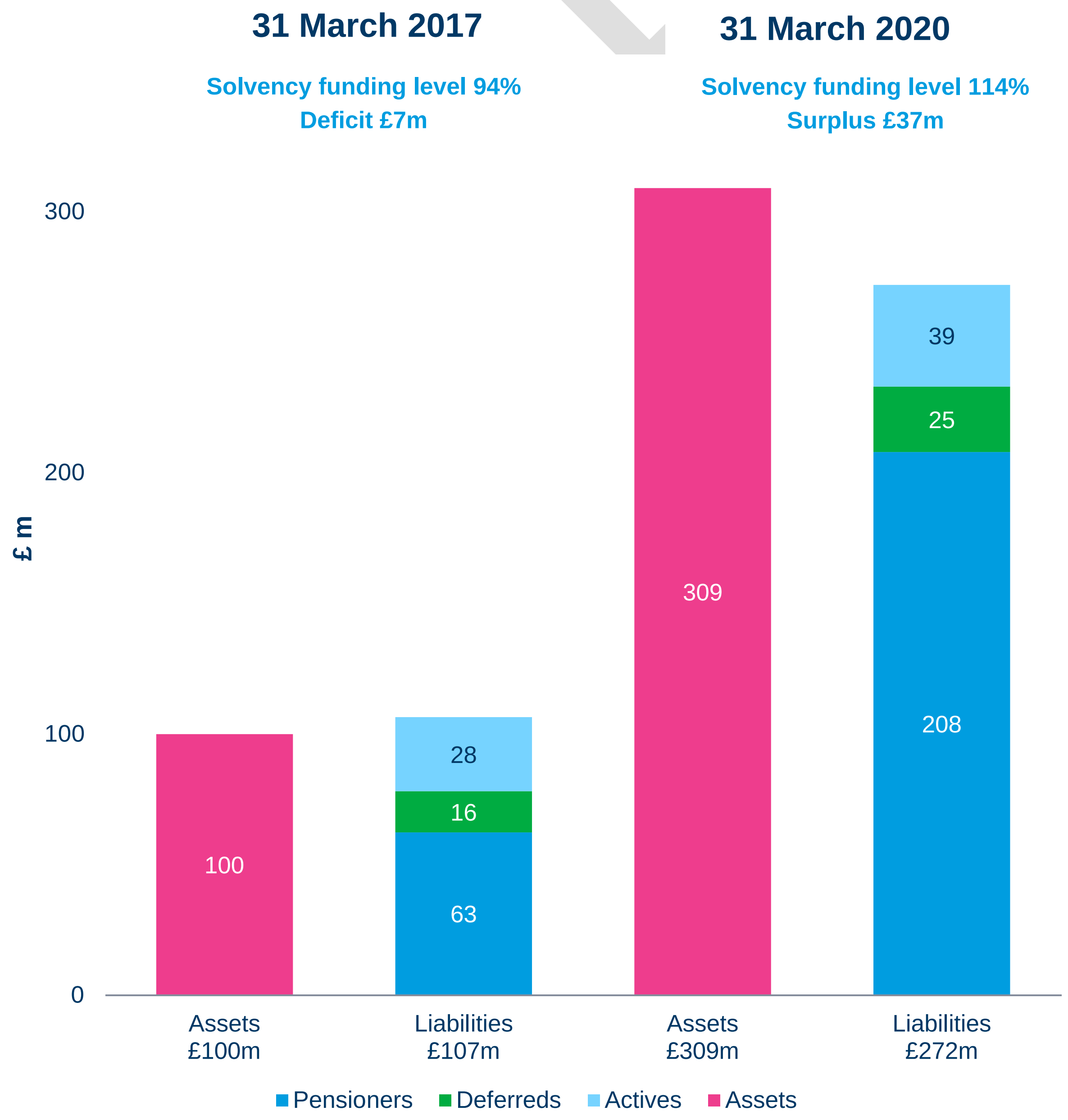
- Following the Government's recent consultation, the liabilities also allow for the "Interim solution" for GMP to be extended in order to provide full CPI indexation on GMP benefits in payment for all members with a state pension age after 5 April 2016. The cost of this (combined with the cost of the McCloud judgment) is set out in Section 2.
- Assumed rate of future long term average CPI inflation – based on the yields available on gilts and index-linked gilts of appropriate duration less an adjustment of 1% p.a. before 2030 and 0% after 2030 to allow for the difference between market-implied future RPI and estimated future CPI inflation (see comment regarding RPI reform below). This is broadly equivalent to 2.25% p.a. over the term of the liabilities.
- Since the valuation date, it has been announced that RPI inflation will be reformed with effect from 2030 to align the index with the CPIH inflation measure. At the valuation, we have allowed for a variable RPI CPI gap as set out above in order to incorporate the impact of this change on market implied inflation.
- Investment returns linked to the return on UK Government gilts for past and future service – 0.7% p.a. at the valuation date, based on a prudent estimate of long term returns on the Fund's assets.
- Future pay growth – 0.5% p.a. over and above CPI in the longer term in respect of members of First Aberdeen Limited and 1.375% p.a. over and above CPI in the longer term in respect of members of First Glasgow Limited.
- Baseline life expectancy based on a scheme-specific mortality study with separate assumptions for each employer
- Future mortality improvements based on the CMI 2019 model with a long-term improvement trend of 1.75% p.a.
- The surplus at the valuation date is sufficient to offset the primary contribution requirements for the projected future working lifetime of the active membership. Therefore the Administering Authority and employers have agreed that no employer contributions will be required for the period of the rate certificate.
- There have been a number of significant events, specifically a fund merger and buy-in effective as at 19 November 2020. This doesn't affect the conclusions in this report but we have included further commentary on the buy-in within the report.
- Throughout this report, unless specified otherwise, references to the 31 March 2017 are solely in respect of the Aberdeen City Council Transport Fund and have no regard to the position of the Strathclyde No3. Pension Fund (the Fund from which First Glasgow Limited transferred).

2

Key results of the funding assessment

Solvency funding position

The table below compares the assets and liabilities of the Fund at 31 March 2020. Figures are also shown for the last valuation (solely for First Aberdeen as the sole employer within the ACCTF at that time) as at 31 March 2017 for comparison. Please note that the liabilities at both dates **exclude** the present value of pre 1986 recharges that are the responsibility of the NESPF.



The liability value at 31 March 2020 shown in the chart above is known as the Fund's "solvency funding target". The solvency funding target is calculated using assumptions that the Administering Authority has determined are appropriate having consulted with the actuary, and are also set out in the FSS.

The LGPS Regulations require the contributions to be set so as to secure the Fund's solvency and long-term cost efficiency. In this context solvency means being able to meet the liabilities as and when they arise, with long-term cost efficiency meaning that contribution levels should not be set so as to give rise to additional costs at a later date. In practice, contribution levels have been set so as to target a solvency funding level of 100%, based on the funding parameters outlined in Section 1 above.

The chart shows that **at 31 March 2020 there was a surplus of £37m** against the Fund's solvency funding target. An alternative way of expressing the position is that **the Fund's assets were sufficient to cover 114% of its liabilities** – this percentage is known as the solvency funding level of the Fund.

At the previous valuation at 31 March 2017 the deficit was £7m, equivalent to a solvency funding level of 94%. The key reasons for the changes between the two valuations are considered in Section 3.

Further details of the way in which the solvency funding target has been calculated are set out in Appendix A.

Primary Contribution Rate

The "Primary rate" of the employers' contribution is the contribution rate required to meet the cost of the future accrual of benefits including ancillary, death in service and ill health benefits together with administration costs.

The valuation looks at the normal employer contribution rate required to cover the cost of the benefits (including death benefits and expenses) that will be built up over the year after the valuation date (the "Primary Contribution Rate"). A summary of the assumptions used is provided in Appendix A.

The table below gives a breakdown of the Primary Contribution Rate at 31 March 2020 and also shows the corresponding rate at 31 March 2017 for comparison. In calculating the average Primary Contribution Rate we have not made any allowance for future members to opt for the 50:50 scheme.

Active members pay contributions to the Fund as a condition of membership in line with the rates required under the governing Regulations (see Appendix D).

	% of Pensionable Pay plus £ amount*	
PRIMARY CONTRIBUTION RATE	**31 March 2020**	**31 March 2017**
Normal Contribution rate for retirement and death benefits including expenses	50.0% plus £140,000 p.a.**	64.6%
Average member contribution rate	6.3%	6.1%
Primary contribution rate	43.7% plus £140,000 p.a.**	58.5%

**In line with updated CIPFA guidance, the 2020 Primary Contribution Rate is the weighted average of the individual employer Primary Contribution Rates as derived based on their individual circumstances*

***Due to the rapidly declining payroll we have certified the administration expenses as a £ amount rather than a % of pensionable pay.*

Correcting the imbalance – Secondary Contribution Rate

The funding objective as set out in the FSS is to achieve and maintain a solvency funding level of 100% of liabilities (the solvency funding target). In line with the FSS, where a shortfall exists at the effective date of the valuation a recovery plan will be put in place which requires additional contributions to correct the shortfall. Equally, where there is a surplus it is usually appropriate to offset this against contributions for future service, in which case contribution reductions will be put in place to allow for this.

The FSS sets out the process for determining the recovery plan in respect of each employer.

The surplus at the valuation date (including allowance for the estimated costs in relation to the McCloud judgment) is sufficient to offset the primary contribution requirements for the projected future working lifetime of the active membership. Therefore the Administering Authority and employers have agreed that no employer contributions will be required for the period of the rate certificate.

> The “Secondary rate” of an individual employers’ contribution is an adjustment to the Primary Contribution Rate to reflect any past service deficit or surplus, to arrive at the rate the employers are required to pay.

The McCloud Judgment and GMP indexation

The "McCloud judgment" refers to a legal challenge in relation to historic benefit changes for all public sector schemes being age discriminatory. The Government announced in 2019 that this needs to be remedied for all schemes including the LGPS. This is likely to result in increased costs for some employers. This remedy is not yet agreed but the consultation in 2020 set out the Government's intended approach to address the implications.

As described in Section 1 of this report, the above figures include an allowance for the estimated cost of the McCloud judgment. Additionally, they also assume that full CPI indexation of GMP benefits in payment will be extended to cover all members with a state pension age after 5 April 2016. At the overall Fund level we estimate that the cost of both these factors could be an increase in past service liabilities of broadly £2 million and an increase in the Primary Contribution rate in respect of the McCloud Judgment of <0.1% of Pensionable Pay per annum from 2020 until 2022. For the purpose of contribution setting, we have spread this over the three years in the certification period resulting in a cost of <0.1% of Pensionable pay per annum from 1 April 2021 – 31 March 2024.

Fund Merger and buy-in events

First Glasgow Limited was admitted as an employer to the Fund in late 2019 and this is therefore the first valuation of the ACCTF as a multi-employer Scheme.

The Fund subsequently completed a c£230m pensioner buy-in transaction with the Rothesay Life in November 2020. This transaction insures the pension payments of 1,371 pensioners across both employers through a pensioner-only buy-in. This was a significant de-risking step for Fund and its employers as a number of risks have been mitigated.

In relation to existing and former employees of First Aberdeen Ltd, pension increases in deferment and payment in respect of benefits accrued prior to 26 October 1986 are recharged monthly on a £ for £ basis to the North East Scotland Pension Fund (NESPF). This is because as part of the deregulation of transport services the liability currently remains with the Grampian Regional Transport Authority (a historic employer in the NESPF) and not First Aberdeen Ltd. For the year to 31 March 2021, recharges passed to the NESPF are projected to be around £350,000. The liabilities quoted at the valuation date in this report are shown net of the liabilities which are recharged to the NESPF in respect of the pre 1986 pension increases.

3

Experience since last valuation

Summary of key inter-valuation experience

The outcomes from the valuation are determined both by the assumptions adopted for the future, and the Fund's historic experience relative to assumptions made in the past. In this section we consider the effect of the Fund's experience over the last three years.

The last actuarial valuation was carried out with an effective date of 31 March 2017. With effect from 1 April 2015 the scheme's benefit structure changed from a Final Salary Scheme to a Career Average Revalued Earnings (CARE) Scheme, and the 2017 actuarial valuation took these changes into account.

The average Pensionable Salary increase for the Fund members who were in service for the whole of the inter-valuation period was 2.2% per annum.

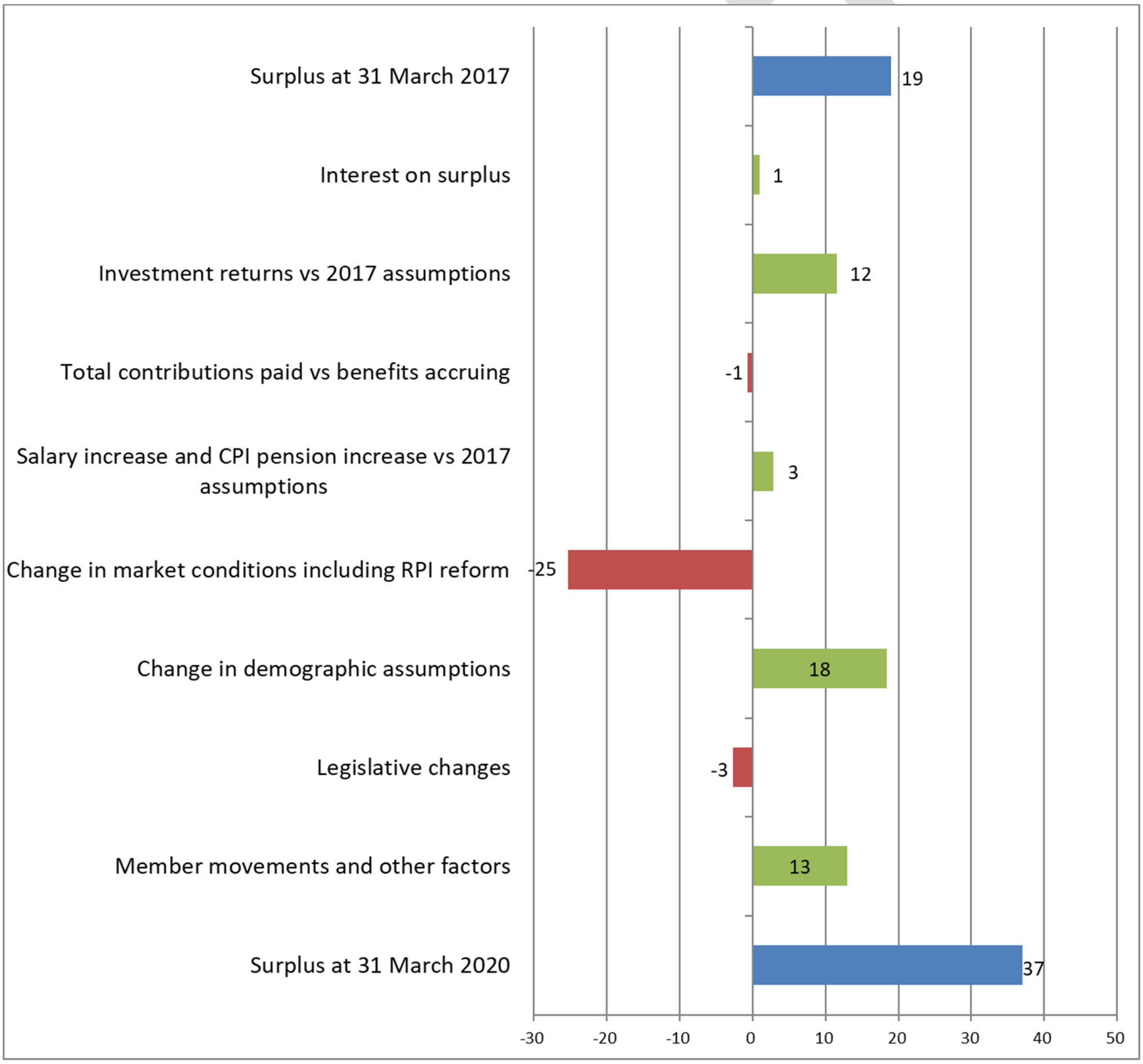
Pensions in payment (in excess of Guaranteed Minimum Pensions (GMPs) were increased as guaranteed under the Fund as follows:

- April 2018 3.0%
- April 2019 2.4%
- April 2020 1.7%

Over the inter-valuation period, benefit inflation has averaged 2.4% p.a.

Reasons for the change in funding position since the last actuarial valuation

The chart below sets out the main reasons for the change in the position between 31 March 2017 and 31 March 2020 of the now combined Fund, starting from the combined valuation positions at the 2017 valuations. The position at 31 March 2017 is taken from the Strathclyde No3. Pension Fund Valuation report. Figures shown in £m.



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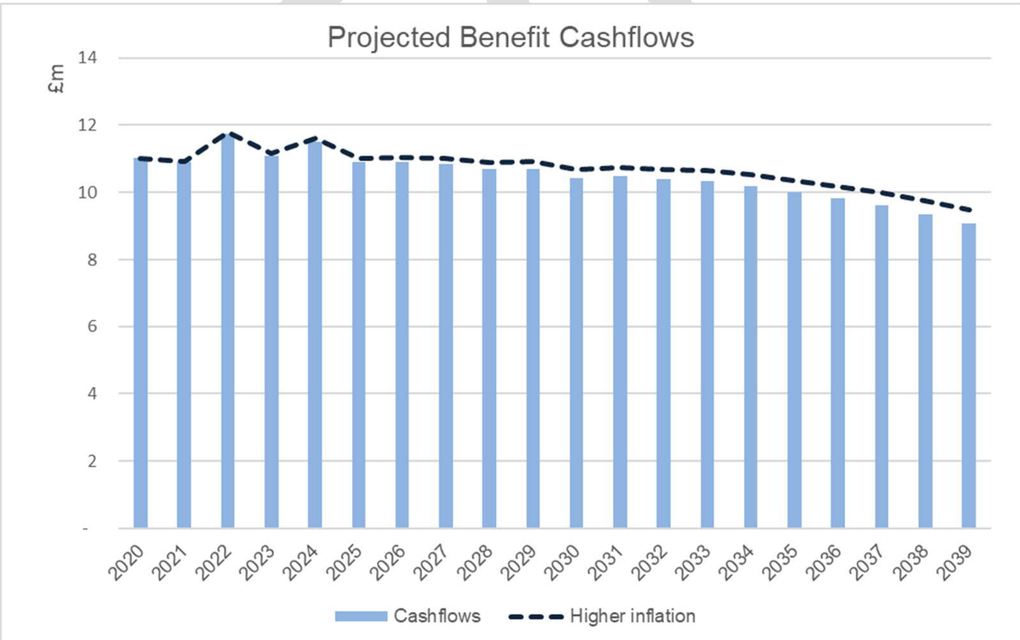
Cash flows, risks and alternative funding positions

Benefit cash flows

The projected benefit cash flows which result from applying the assumptions as set out in Appendix A are shown in the chart below (gross of the benefits which are recharged to the North East Scotland Pension Fund). The additional trendline sets out how those total projected benefit cash flows would change if we were to assume inflation of 0.25% p.a. higher than the assumption used for the actuarial valuation as set out earlier and in Appendix A.

> The actuarial valuation process is principally concerned with projecting all the expected benefit cash flows into the future, and then converting them into present day values by discounting them to allow for assumed future investment returns. The chart shows those projected cash flows, and also illustrates how sensitive they are to the future inflation assumption.

Over the 20 years following the valuation date, the extra benefit payments (including the recharges referenced above) which would result from the extra 0.25% p.a. inflation assumption are projected to be £4.4m.



Projected funding position at next actuarial valuation

The surplus at the valuation date is sufficient to offset the primary contribution requirements for the projected future working lifetime of the active membership. Therefore the Administering Authority and employers have agreed that no employer contributions will be required for the period of the rate certificate

The next actuarial valuation will take place with an effective date of 31 March 2023. If experience up to that date were to be in line with the assumptions made for this current actuarial valuation and contributions are paid at the agreed rates or amounts, there would be a surplus at 31 March 2023 of £31m, equivalent to a funding level of 114%. This is based on a roll forward from 30 November 2020 i.e. after taking into account the buy-in. This does not make any allowance for termination of either of the employers with any exit credits becoming payable.

Material risks faced by the Fund

The Fund is subject to some potentially material risks that are, to an extent, outside the Administering Authority's control, but could affect the funding level and ultimately the employer contribution requirements. Any material worsening of the funding level may mean employer contributions need to be recommenced to be able to provide the benefits built up in the Fund – unless experience acts in other ways to improve the funding level. Examples of such risks, and how the Administering Authority manages them, are:

> Funding a defined benefit pension scheme such as the LGPS is by its nature uncertain, and involves some level of risk. The principal funding risks are investment (e.g. whether the Fund earns the desired level of long-term real returns) and demographic (e.g. whether longevity of members is longer or shorter than anticipated). In practice, the key is whether such risks can be managed and mitigated.

- If an Employer becomes unable to pay contributions (when required) or to make good deficits in the future, the Fund's assets will be lower than expected and the funding level will be worse than expected. The Administering Authority regularly monitors the financial strength of the Employers so that actions can be taken to mitigate (but not fully remove) the risk.
- If future investment returns on assets are lower than assumed in the valuation, the Fund's assets will be lower, and the funding level worse, than expected. The Administering Authority has a process in place to monitor investment performance quarterly, and it reviews the Fund's investment strategy alongside each actuarial valuation. In practice given the low risk strategy and prudent discount rate, this risk is predominantly mitigated.
- If improvements in life expectancy are greater than assumed for non-insured members, the cost of benefits will increase because members are living longer than expected. This will mean the funding level will be worse than expected. The Administering Authority regularly reviews the Fund's experience and ensures that the assumptions it makes about members' life expectancy take the most recent information available into account.

- If members make decisions about their options which increase the Fund's liabilities, the funding level will be worse than expected. An example would be if members commute less pension for cash, than is being assumed. The Administering Authority reviews the Fund's experience at each valuation to ensure that their treatment of member options remains appropriate.

The pensioner buy-in entered during November 2020 significantly reduces the Fund's exposure to interest rate, inflation and longevity risks and therefore reduces reliance on the employer covenant substantially.

Impact of COVID-19

The valuation results and employer contributions shown in this report are assessed as at 31 March 2020. In March 2020 we saw significant falls in equity markets around the world in relation to the COVID-19 pandemic (in practice given the low risk investment strategy, the impact on the Fund in this respect was limited), though markets subsequently rebounded strongly over the year. This potentially has consequences in terms of funding and risk which have been considered when discussing contribution requirements with employers. As the position continues to evolve, this will be kept under review by the Administering Authority, who will monitor the development of the situation and keep all stakeholders informed of any potential implications so that the outcome can be managed effectively.

Sensitivity of funding position to changes in key assumptions

The value placed on the Fund's liabilities is critically dependent on the assumptions used to carry out the calculations. If future experience differs from the assumptions the Administering Authority has used after consulting with the Employers, then the projected future funding level will be different from the level described above.

To illustrate how sensitive the funding level is to experience being different from assumed, the table below shows how the valuation results at 31 March 2020 would have differed given small changes in the key assumptions. These sensitivities have no regard to the subsequent buy-in.

Assumption change	Increase/(Reduction) in surplus at 31 March 2020 (£m)	Resultant surplus /(deficit) at 31 March 2020 (£m)
Original solvency funding position	**-**	**37**
Real investment return 0.25% lower than assumed	-10	27
Long term improvement rate in life expectancy increased by 0.25% per annum	-2	35
Fund Assets at valuation date fall by 5%	-15	22

Appendices

Appendix A
Assumptions

How the benefits are valued

In order to calculate the liabilities, there is a need to make assumptions about various factors that affect the cost of the benefits provided by the Fund – for example, how long members will live, or the future level of inflation. The table below explains the key assumptions being made in the valuation.

Assumption	Why it is important and how it impacts on the liabilities
Discount rate	The majority of benefits in a pension fund are paid many years in the future. In the period before the benefits are paid, the Administering Authority invests the funds held by the Fund with the aim of achieving a return on those funds. When calculating how much money is needed now to make these benefit payments, it is appropriate to make allowance for the investment return that is expected to be earned on these funds. This is known as "discounting". The higher the investment return achieved, the less money needs to be set aside now to pay benefits. The calculation reflects this by placing a lower value on the liabilities if the "discount rate" is higher.
Inflation	Pensions in payment increase in line with Consumer Price Inflation (CPI). Salary growth is also normally linked to price inflation in the long term. A higher inflation assumption will, all other things being equal, lead to a higher value being placed on the liabilities.
Pensionable Salary growth	Benefits earned prior to 1 April 2015 for active members are based on their salaries immediately before retirement, so it is necessary to make an assumption about future Pensionable Salary growth. The higher this assumption, the higher the value placed on the liabilities for active members.
Life expectancy	Pensions are paid while the member (and potentially their spouse or partner) is alive. The longer people live, the greater is the cost of providing a pension. Allowing for longer life expectancy therefore increases the liabilities.

The liabilities of the Fund are calculated by projecting forward all of the future benefit cash flows and discounting them back to the effective date of the valuation, using these assumptions. For example, the liability for a single pensioner is calculated by estimating the amount of each pension payment they will receive in the future, multiplying by the probability that the member will still be alive by the date of each payment, and then discounting each payment back to the effective date of the valuation using the appropriate discount rate, and then summing up all of these discounted amounts. The liabilities for the whole Fund are calculated by summing the liabilities for each of the individual members.

Financial assumptions used to calculate the solvency funding target

The table below summarises the key financial assumptions used in the calculation of the solvency funding target at whole Fund level and those used for the 31 March 2017 actuarial valuation. Section 1 of this report sets out how these assumptions might vary from one employer to another.

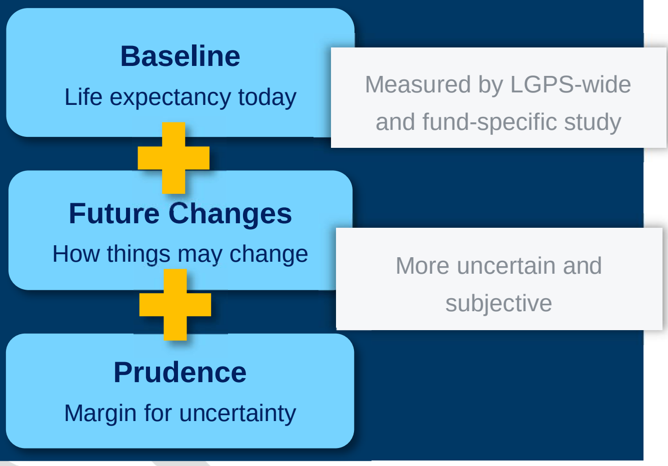
Financial assumptions	31 March 2020	31 March 2017*
Discount rate	0.7% p.a.	1.6% p.a.
Price inflation (CPI)	Set equal to RPI less 1% p.a. pre 2030 and RPI post 2030, this is broadly equivalent to a single equivalent CPI over the term of the liabilities of 2.25% p.a.	First Aberdeen 2.9% p.a. First Glasgow 2.4% p.a.
Salary increases (short term)	n/a	First Aberdeen 2.4% p.a. until 31 March 2018 First Glasgow n/a
Salary increases (long term)	First Aberdeen CPI plus 0.5% First Glasgow CPI plus 1.375% Broadly equivalent to: First Aberdeen 2.75% p.a. First Glasgow 3.625% p.a.	First Aberdeen 3.4% p.a. First Glasgow 3.775% p.a.
Pension increases in payment:	Broadly 2.25% p.a.	First Aberdeen 2.9% p.a. First Glasgow 2.4% p.a.

**approximate for First Glasgow -see the valuation report for the Strathclyde No3 Pension Fund for further details*

Demographic assumptions used

Post-retirement Mortality

> There are two separate decisions on mortality assumptions:
> – The baseline table for the current rates of mortality; and
> – The allowance for future improvements.



Mortality (or life expectancy) tables are typically made up of three elements: a baseline table (equivalent to the expected current mortality), an allowance for future improvements, and a margin for prudence. Very few pension funds are large enough for them to be able to determine a bespoke set of baseline assumptions based purely on the fund's own membership experience. Typically, the life expectancy assumptions are set by benchmarking a fund's membership profile and mortality experience against larger external datasets. For this actuarial valuation, we have benchmarked the Fund's membership profile and experience against the "S tables" published by the CMI. We have applied weightings as appropriate to adjust the standard tables so as to arrive at assumptions which are appropriate for the Fund. We have generally used the S3PA tables ("middle" tables for females), other than for female dependants where the S3DA tables have been used and for members retiring in ill health where the S3IA tables have been used. At the ACCTF 2017 actuarial valuation the S2PA tables were used (S2DA tables for female dependants).

Future improvements are assumed to follow the CMI 2019 model with a 1.75% p.a. long-term improvements trend. At the 2017 actuarial valuation the CMI 2015 model with 1.75% p.a. long-term trend was used.

The weightings and age ratings applied to the above are set out in the table below.

Current Status	**Retirement Type**	**Weighting – First Aberdeen members 31 March 2020**	**Weighting – First Glasgow members 31 March 2020**	**Weighting/age rating 31 March 2017 ACCTF valuation***
Annuitant	Normal Health	108% males, 88% females	117% males, 94% females	109% males, 87% females
	Dependant	100% males, 104% females	145% males, 111% females	136% males, 118% females
	Ill Health	132% males, 149% females	137% males, 150% females	109% males, 87% females (+3 age rating)
	Future Dependant	128% males, 112% females	139% males, 119% females	128% males, 100% females
Active	Normal Health	112% males, 115% females	112% males, 86% females	99% males, 109% females
	Ill Health	128% males, 169% females	128% males, 131% females	99% males, 109% females (+4 age rating)
Deferred	All	143% males, 102% females	136% males, 110% females	135% males, 97% females
Active/ deferred	Future Dependant	137% males, 121% females	140% males, 120% females	128% males, 100% females

** Only in respect of First Aberdeen Limited as a participating employer in the ACCTF. See the valuation report for the Strathclyde No3 Pension Fund in respect of First Glasgow Limited.*

A weighting applied to an actuarial table has the effect of increasing or reducing the chance of survival at each age, which increases or reduces the corresponding life expectancy. Similarly, an age rating applied to an actuarial table has the effect of assuming that beneficiaries have a life expectancy equal to those older (or younger) than their actual age.

The mortality assumptions used for the 31 March 2020 valuation result in the following life expectancies:

	Male Life Expectancy at 65		Female Life Expectancy at 65	
	First Aberdeen	First Glasgow	First Aberdeen	First Glasgow
Pensioners	21.9	21.3	25.2	24.7
Actives aged 45 now	23.6	23.6	25.3	27.4
Deferreds aged 45 now	21.7	22.1	26.2	25.6

Pre-retirement Mortality

The following mortality tables (together with any appropriate weightings) have been adopted for mortality rates in the period up to retirement.

	31 March 2020	31 March 2017
Base Table	DxL08 tables with adjustments of 80% (male) 50% (female) to reflect the Fund's membership profile	DxL08 tables with adjustments of 80% (male) 50% (female) to reflect the Fund's membership profile
Allowance for Future Improvements	CMI_2015 [1.5%]	CMI_2015 [1.5%]

Commutation

It has been assumed that, on average, 50% of retiring members will take the maximum tax-free cash available at retirement and 50% will take a 3/80ths cash sum (the standard for pre April 2008 service). Members have the option to commute part of their pension at retirement in return for a lump sum at a rate of £12 cash for each £1 per annum of pension given up.

Retirement lump sums are less costly for the Fund to provide than the alternative pension, as members receive only £12 of each £1 p.a. of pension given up. If members take the cash sum option at a higher rate than has been assumed then this will normally lead to an improvement in the funding level.

Early retirement

If members take early retirement to a greater extent than has been assumed then this will typically lead to a worsening of the funding level. This is because many members are able to take substantial parts of their benefits from age 60 without them being reduced for early payment.

Some members are entitled to receive their benefits (or part of their benefits) unreduced from an age prior to the Fund's normal pension age under the "Rule of 85" provisions of the Regulations. This age will be at some point between ages 60 and 65, depending on the length of a member's pensionable service. The calculations in respect of the relevant service to which these terms apply (basically pre April 2008 service but with transitional protections for certain members) allow for members to retire at this age.

For post April 2008 service (other than protected service) the situation is different since the "Rule of 85" has been removed (and for post December 2006 service for new entrants to the Scheme from that date). For this service we have assumed the earliest age at which unreduced benefits become an entitlement is 65, except for those members who have protected status under the transitional provisions.

For post April 2015 service, early retirement factors are applied where the retirement age described above is below the member's eligible retirement age for unreduced benefits for post April 2015 service. Factors are in line with the standard scheme factors produced by the Government Actuary's Department.

No allowance has been made for non-ill health early retirements prior to the ages specified above. Additional capital contributions will be paid by employers in respect of the cost of these retirements.

However, for those members who are entitled to receive their accrued benefits (or part of those benefits) prior to the retirement age described above and who are over this age but under 65, a proportion of the active membership is assumed to retire in normal health prior to age 65, as set out below:

	% retiring per annum	% retiring per annum
Age	Males	Females
60	10	20
61	8	15
62	8	15
63	8	15
64	8	15
65	100	100

The appropriate early retirement factors applied to the relevant tranche of benefits are in line with the Government Actuary's Department (GAD) guidance.

Ill health retirement

A small proportion of the active membership has been assumed to retire owing to ill health. As an example of the rates assumed, the following is an extract from the decrement table used:

The level of ill-health retirement benefit provided for a member falls into one of two "tiers", depending on whether and when the member might be expected to resume gainful employment. Tier 1, for example, is on the basis that the member is unlikely to be able to do so before Normal Pension Age. Full details are set out in the LGPS (Scotland) Regulations and associated guidance.

	% retiring per annum	% retiring per annum
Age	Males	Females
35	0.09	0.08
45	0.26	0.24
55	1.14	1.00

The proportion of ill health early retirements falling into each tier category, split by males and females, has been assumed to be as set out below:

Tier 1	Tier 2
86%	14%

Withdrawal

This assumption relates to those members who leave the scheme with an entitlement to a deferred pension or transfer value. It has been assumed that active members will leave the Scheme at the following sample rates:

	% leaving per annum	% leaving per annum
Age	Males	Females
25	20.25	22.38
35	5.09	6.27
45	2.54	3.89

In relation to pre 2015 benefits, deferred benefits tend to be less costly for the Fund to provide than if the member had remained in the Fund until retirement. If the number of members leaving the Fund is greater than expected then this will typically lead to a slight improvement in the funding level.

Partners' and Dependants' Proportions

It has been assumed that the proportions of members below will on death give rise to a dependant's pension (spouse's and partner's), and that spouses/partners of female (male) members are three years older (younger), on average than the member.

	% spouse/partner	% spouse/partner
Age	Males	Females
25	45	57
35	73	75
45	76	75
55	78	75
65	80	69

If more members than assumed have partners then this will lead to an increase in the number of dependants pensions coming into payment over and above that expected. This would lead to a worsening of the funding level.

Assumptions used to calculate the Primary Contribution Rate

The cost of future accrual (the Primary Contribution Rate) has been calculated using the same actuarial assumptions as used to calculate the solvency funding target and recovery plan as set out above.

Appendix B
Summary membership data

The membership data is summarised in the tables, with figures at the previous valuation shown for comparison.

Data in relation to members of the Fund were supplied by the Fund's administrator on behalf of the Administering Authority (2017 First Glasgow data taken from the Strathclyde No3 Pension Fund valuation report). The accuracy of the data provided has been relied on. While reasonableness checks on the data have been carried out, they do not guarantee the completeness or the accuracy of the data. Consequently, Mercer does not accept any liability in respect of its advice where it has relied on data that is incomplete or inaccurate.

First Aberdeen Limited

	31 March 2017	31 March 2020
Active members		
Number	61	32
Total Pensionable Salaries (£000s p.a.)	1,695	932
Average Pensionable Salary (£ p.a.)	27,788	29,124
Average age (weighted by pension)	55.7	56.5
Deferred pensioners (including undecideds)		
Number	132	109
Total deferred pensions revalued to valuation date (£000s p.a.)	391	331
Average deferred pension (£ p.a.)	2,964	3,039
Average age (weighted by pension)	53.9	54.5
Current Pensioners and Dependants		
Number	424	428
Total pensions payable (£000s p.a.)	3,078	3,416
Average Pension	7,259	7,982
Average age (weighted by pension)	70.9	72.1

Pensions are gross of the pre 86 pension increases recharged to the North East Scotland Pension Fund.

First Glasgow Limited

	31 March 2017	31 March 2020
Active members		
Number	118	45
Total Pensionable Salaries (£000s p.a.)	2,983	1,372
Average Pensionable Salary (£ p.a.)	25,280	30,498
Average age (weighted by pension)	57.8	57.9
Deferred pensioners (including undecideds)		
Number	114	79
Total deferred pensions revalued to valuation date (£000s p.a.)	430	317
Average deferred pension (£ p.a.)	3,772	4,007
Average age (weighted by pension)	56.3	58.6
Current Pensioners and Dependants		
Number	897	944
Total pensions payable (£000s p.a.)	5,340	6,196
Average Pension	5,953	6,563
Average age (weighted by pension)	66.3	70.0

Appendix C
Assets

The market value of the Fund's assets was c£309m on the valuation date.

The Administering Authority's investment strategy is to proportion the Fund's assets by asset class as shown in the table below (this is subject to a strategy review following the buy-in which occurred after the valuation date). The actual distribution of assets will vary over time due to changes in financial markets.

	Investment strategy
	%
Index linked Gilts	70%
Cash	30%
Total	100%

The Administering Authority also holds additional voluntary contributions (AVCs) which are separately invested. These assets have been excluded from the market value shown as they exactly match the value of the benefits they cover.

The details of the assets at the valuation date and the financial transactions during the inter-valuation period have been obtained from the audited accounts for the Fund.

Appendix D
Scheme Benefits

The benefits valued within our calculations are those in force at the effective date of the valuation. Full details of these can be found in the Local Government Pension Scheme (Scotland) Regulations 2018 (as amended). The principal details are as follows:

The Local Government Pension Scheme (Scotland) Regulations 2018 (https://www.legislation.gov.uk/ssi/2018/141/contents)

The Local Government Pension Scheme (Transitional Provisions and Savings) (Scotland) Regulations 2014 (https://www.legislation.gov.uk/ssi/2014/233/contents/made)

Directions made by the Treasury under Section 59A of the Social Security Pensions Act 1975 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/761639/Treasury_Direction_under_section_59A_Social_Security_Pensions_Act_1975.pdf) and recent consultation on future treatment (https://www.gov.uk/government/consultations/public-service-pensions-guaranteed-minimum-pension-indexation-consultation). We have also assumed that that the directions will ultimately be extended to require the LGPS to become responsible for increases to GMPs for **all** members reaching State Pension Age after 5 April 2016.

The Fund is also responsible for paying and, where appropriate, recharging to employers the benefits arising from the award of compensatory added years (CAY) of service on premature retirement. Unless these CAY benefits have been converted into "funded" benefits, they are normally recharged to the relevant employer (together with associated pension increases), and so are excluded from the valuation.

The benefits that will emerge from money purchase AVCs paid by members, and SCAVCs paid by employers, and the corresponding invested assets in respect of these AVCs and SCAVCs, have been excluded from the valuation.

UK and European law requires pension schemes to provide equal benefits to men and women in respect of service after 17 May 1990 (the date of the "Barber" judgment) and this includes providing equal benefits accrued from that date to reflect the differences in GMPs. Following the Lloyds Bank case in 2018, HM Treasury has issued a consultation on equalising and indexation of GMPs in all the public service pension schemes, including the LGPS, and discussions are ongoing about the extent of any inequalities and how these might be addressed.

The valuation makes no allowance for removal of these inequalities. It is consequently possible that additional funding will be required for equalisation once the law has been clarified. It is recommended that the Administering Authority seek further legal advice if it is concerned about this issue.

The McCloud Judgment

The McCloud judgment in the LGPS refers to the legal decisions (initially by the Employment Appeal Tribunal and then ratified by the Court of Appeal) in the Sargeant/McCloud cases for the Fire and Judiciary pension arrangements. The Court ruled that transitional protections afforded to older members when these schemes were amended constituted unlawful age discrimination. Remedial action, in the form of benefit changes for these schemes, will therefore be required.

Although the above cases did not relate directly to the LGPS, the LGPS also put in place protections for older members as part of the reforms which came into effect from 2015. For the LGPS these took the form of an underpin, where older members would get the better of the benefits payable under the new and old schemes. The UK Government set out a proposed remedy in a consultation in July 2020, which broadly would ensure that all members who were in the LGPS before 31 March 2012 would be granted the statutory underpin protection for all service up to 31 March 2022.

As advised by the SPPA and following discussions with the Administering Authority, in order to consider a reasonable provision for the potential costs in employer contributions we have valued the cost of McCloud to be the estimated cost of providing the underpin set out above to all members. More specifically we have agreed with the Administering Authority to:

- Estimate the underpin benefits for members for service after 31 March 2015 (when the new scheme took effect) who joined the Fund before 2012.
- Compare this to the actual post 31 March 2015 benefits.
- Calculate the cost for each member as the value of the underpin benefits less the value of the actual benefits (ignoring members where the value of the actual benefits is higher).
- Sum these costs across all members to give the impact of the underpin for each employer.

We have calculated this cost across all benefits (including deferred benefits for active members who are assumed to leave the scheme before retirement in the future).

Further detail on the proposed remedy can be found in the below consultation document:

https://www.lgpslibrary.org/assets/cons/lgpsscot/20200731CD.pdf

Appendix E
Analysis of Membership Experience

The analysis below compares the actual experience over the 3 year period for both employers with the assumptions used for the 2020 valuation.

	Actual	Expected	%
Ill Health Retirements	4	9	43
Withdrawals	15	2	750
Pensioner Deaths (lives)	142	93	152
Pensioner Deaths (£000 p.a. of pension)	635	501	127

Note that actual withdrawals can include members moving to another LGPS Fund, bulk transfers and also transfers under the special transfer club terms.

Appendix F

Rates and Adjustments Certificate issued in accordance with Regulation 60

Name of fund	Aberdeen City Council Transport Fund

Primary Contribution Rate

I hereby certify that, in my opinion, the primary rate of the employers' contribution for the whole Fund for each of the three years beginning 1 April 2021 is 43.7% of pensionable pay plus £140,000 p.a. in respect of expenses.

The primary rate of contribution for each employer for the three year period beginning 1 April 2021 is set out in the attached schedule.

Secondary Contribution Rate

I hereby certify that, in my opinion, the secondary rate of the employer's contribution for the whole Fund for each of the three years beginning 1 April 2021 is as follows:

2021/22 -43.7% of pensionable pay less £140,000

2022/23 -43.7% of pensionable pay less £140,000

2023/24 -43.7% of pensionable pay less £140,000

The secondary rate of contribution for each employer for each of the three years beginning 1 April 2021 is set out in the attached schedule. The above secondary rates, and the secondary rates for each employer, include a provision for the costs of the McCloud judgment as set out in the notes to Appendix G.

Contribution amounts payable

The total contribution payable for each employer is the total of the primary and secondary rates as detailed in the attached schedule. Contributions will be paid monthly in arrears with each payment normally being due by the 19th of the following month (or the 22nd if paid electronically) or at intervals agreed with the Administering Authority unless otherwise noted in the schedule.

Further adjustments

A further individual adjustment shall be applied in respect of each non-ill health early retirement occurring in the period of three years covered by this certificate. This further individual adjustment will be calculated in accordance with methods agreed from time to time between the Fund's Actuary and the Administering Authority.

The contributions set out in the attached schedule represent the minimum contribution which may be paid by each employer in total over the 3 years covered by the certificate. Additional contributions or a different pattern of contributions may be paid if requested by the employer concerned at the sole discretion of the Administering Authority as agreed with the Actuary. The total contributions payable by each employer will be subject to a minimum of nil%.

The individual employer contributions may be varied as agreed by the Actuary and Administering Authority to reflect any changes in contribution requirements as a result of the McCloud judgment remedy as set out in this report and/or any benefit costs being insured with a third party or parties including where the third party or parties participate in the Fund.

In cases where an element of an existing employer's surplus or deficit is transferred to a new employer on its inception, the existing employer's secondary contributions, as shown on the schedule to this Certificate in Appendix G, may be reallocated between the existing employer and the new employer to reflect this, on the advice of the Actuary and as agreed with the Administering Authority so that the total payments remain the same overall.

The Administering Authority and employer with advice from the Fund's Actuary can agree that contributions payable under this certificate can be sourced under an alternative financing arrangement which provides the Fund with equivalent cash contributions.

Regulation 60(8)

No allowance for non-ill health early retirements has been made in determining the results of the valuation, on the basis that the costs arising will be met by additional contributions. Allowance for ill health retirements has been included in each employer's contribution rate, on the basis of the method and assumptions set out in the report.

Signature:		
Name:	Paul Middleman	Laura Evans
Qualification:	Fellow of the Institute and Faculty of Actuaries	Fellow of the Institute and Faculty of Actuaries
Date of signing:	29 March 2021	

Appendix G

Schedule to the Rates and Adjustments Certificate dated 31 March 2021

Employer	Primary rate 2021/22 to 2023/24	Secondary rates			Total Contribution rates		
		2021/22	2022/23	2023/24	2021/22	2022/23	2023/24
First Aberdeen Limited (801)	44.6% plus £60,000	-44.6% plus £60,000			nil	nil	nil
First Glasgow Limited (802)	43.2% plus £80,000	-43.2% plus £80,000			nil	nil	nil

Important notes to the Certificate:

1. The percentages shown are percentages of pensionable pay and apply to all members, including those who are members under the 50:50 option under the LGPS.

2. Where the secondary rate is a deduction to the primary rate due to an employer being in surplus, the total annual contributions payable by each employer will be subject to a minimum of nil % i.e. no monies can be refunded to an employer whilst they participate in the Fund.

3. The above primary and secondary contributions include provision for the estimated effect of the McCloud judgment based on the proposed remedy set out in the 2020 Government consultation. Once the final remedy for McCloud is known, the position will be reviewed.

4. Separate payments will be made from the North East Scotland Pension Fund to the Aberdeen City Council Transport Fund in relation to pension increases payable to retired members relating to benefits accrued prior to 26 October 1986, unless capitalised via a one off payment as agreed with the Administering Authority of both Funds and First Aberdeen Limited which results in the ceasing of the arrangement. Any required recharge amounts will be calculated by the Fund separately where appropriate.

Appendix H
Glossary

Actuarial Valuation: an investigation by an actuary into the ability of the Fund to meet its liabilities. For the LGPS the Fund Actuary will assess the funding level of each participating employer and agree contribution rates with the administering authority to fund the cost of new benefits and make good any existing deficits as set out in the separate Funding Strategy Statement.

Administering Authority: the council with a statutory responsibility for running the Fund and that is responsible for all aspects of its management and operation.

Best Estimate Assumption: an assumption where the outcome has a 50/50 chance of being achieved.

Bonds: loans made to an issuer (often a government or a company) which undertakes to repay the loan at an agreed later date. The term refers generically to corporate bonds or government bonds (gilts).

Career Average Revalued Earnings Scheme (CARE): with effect from 1 April 2015, benefits accrued by members in the LGPS take the form of CARE benefits. Every year members will accrue a pension benefit equivalent to 1/49th of their pensionable pay in that year. Each annual pension accrued receives inflationary increases (in line with the annual change in the Consumer Prices Index) over the period to retirement.

CPI: acronym standing for “Consumer Prices Index”. CPI is a measure of inflation with a basket of goods that is assessed on an annual basis. The reference goods and services currently differs from those of RPI. These goods are expected to provide lower, less volatile inflation increases. Pension increases in the LGPS are linked to the annual change in CPI.

CPIH: An alternative measure of CPI which includes owner occupiers’ housing costs and Council Tax (which are excluded from CPI).

Deficit: the extent to which the value of the Fund’s past service liabilities exceeds the Fund’s assets.

Discount Rate: the rate of interest used to convert a cash amount e.g. future benefit payments occurring in the future to a present value.

Employer Covenant: the degree to which an employer participating in an occupational pension scheme is willing and able to meet the funding requirements of the scheme.

Employer's Future Service Contribution Rate: the contribution rate payable by an employer, expressed as a % of pensionable pay, as being sufficient to meet the cost of new benefits being accrued by active members in the future. The cost will be net of employee contributions and will include an allowance for the expected level of administrative expenses. It is normally the same as an employer's Primary Contribution Rate under the Regulations.

Employer's Primary Contribution Rate: the contribution rate required to meet the cost of the future accrual of benefits including ancillary, death in service and ill health benefits together with administration costs. It is expressed as a percentage of pensionable pay, ignoring any past service surplus or deficit, but allowing for any employer-specific circumstances, such as its membership profile, the funding strategy adopted for that employer, the actuarial method used and/or the employer's covenant. The Primary Contribution Rate for the whole Fund is the weighted average (by payroll) of the individual employers' Primary Contribution Rates.

Employer's Secondary Contribution Rate: an adjustment to the Primary Rate to reflect any past service deficit or surplus, to arrive at the rate each employer is required to pay. The Secondary Rate may be expressed as a percentage adjustment to the Primary Rate, and/or a cash adjustment in each of the three years beginning 1 April in the year following that in which the valuation date falls. The Secondary Rate is specified in the Rates and Adjustments Certificate. For any employer, the rate they are actually required to pay is the sum of the Primary and Secondary Rates. Secondary Rates for the whole fund in each of the three years shall also be disclosed. These will be calculated as the weighted average based on the whole fund payroll in respect of percentage rates and as a total amount in respect of cash adjustments.

Equities: shares in a company which are bought and sold on a stock exchange.

Funding or solvency Level: the ratio of the value of the Fund's assets and the value of the Fund's liabilities expressed as a percentage.

Funding Strategy Statement (FSS): This is a key governance document that outlines how the Administering Authority will manage employer's contributions to the Fund.

Guaranteed Minimum Pension (GMP): This part of a member's pension which was earned between 6 April 1978 and 5 April 1997 and which replaces part of that member's State Scheme benefits in respect of that period.

Investment Strategy: the long-term distribution of assets among various asset classes that takes into account the Funds objectives and attitude to risk.

Liabilities: the actuarially calculated present value of all benefit entitlements i.e. Fund cashflows of all members of the Fund, built up to date or in the future. The liabilities in relation to the benefit entitlements earned up to the valuation date are compared with the present market value of Fund assets to derive the deficit and funding/solvency level. Liabilities can be assessed on different set of actuarial assumptions depending on the purpose of the valuation.

McCloud Judgment: This refers to the linked legal cases of Sargeant and McCloud, and which found that the transitional protections (which were afforded to older members when the public service pension schemes were reformed in 2014/15) constituted unlawful age discrimination.

Past Service Liabilities: this is the present value of the benefits accrued by members up to the valuation date. It is assessed based on a set of assumptions agreed between the Administering Authority and the Actuary.

Percentile: A method of ranking a series of outcomes. For example, a 10th percentile outcome means that only 10% of results would be expected to be as good as or better than the 10th percentile and 90% of results would be expected to be worse.

Present Value: the value of projected benefit payments, discounted back to the valuation date.

Prudent Assumption: an assumption where the outcome has a greater than 50/50 chance of being achieved i.e. the outcome is more likely to be overstated than understated. Legislation and guidance requires the assumptions adopted for an actuarial valuation overall to be prudent.

Real Return or Real Discount Rate: a rate of return or discount rate net of CPI inflation.

Recovery Plan: a strategy by which an employer will make up a funding surplus/deficit over a specified period of time ("the spread period"), as set out in the FSS.

SAB Funding Basis or SAB Basis: a set of actuarial assumptions determined by the LGPS Scheme Advisory Board (SAB). Its purposes are to set out the funding position on a standardised approach so that comparisons can be made with other LGPS Funds, and to assist with the "Section 13 review" as carried out by the Government Actuary's Department. As an example, the real discount rate over and above CPI used in the SAB Basis as at 31 March 2020 was 2.4% p.a., so it can be substantially different from the actuarial assumptions used to calculated the Fund's solvency funding position and contribution outcomes for employers.

Solvency/Funding Level: the ratio of the value of the Fund's assets and the value of the Fund's liabilities expressed as a percentage.

Solvency Funding Target: an assessment of the present value of benefits to be paid in the future. The desired funding target is to achieve a solvency level of a 100% i.e. assets equal to the past service liabilities assessed on the ongoing concern basis.

Spread Period: a strategy by which the Fund will remove a funding surplus via contribution adjustments over a specified period of time ("the spread period"), as set out in the FSS.

50/50 Scheme: in the LGPS, active members are given the option of accruing a lower benefit in the 50/50 Scheme, in return for paying a lower level of contribution.

Mercer Limited
No 4 St Paul's Square, Old Hall Street
Liverpool L3 9SJ
www.mercer.com