Pensions Committee

2.00pm, Monday, 26 March 2018

2017 Actuarial Valuation for Lothian Buses Pension Fund

Item number	5.6
Report number	
Executive/routine	
Wards	All
Council Commitments	Delivering a Council that works for all

Executive Summary

The Lothian Buses Pension Fund is required by law to undertake an actuarial valuation once every three years. The Fund's Actuary assesses the financial health of the pension fund and sets the employer contribution rates required for the next three years.

This report presents the results of the actuarial valuation of the Lothian Buses Pension Fund as at 31 March 2017.

A revised Admission Agreement and Shareholder Guarantee for Lothian Buses plc, formally clarifying the position of the four Councils as guarantors of the pension liabilities in proportion to their respective shareholdings, will be concluded shortly. This will serve to strengthen governance and affirm the employer covenant. The Actuary's certification of the results of the actuarial valuation is predicated upon this assurance and he has reserved the right to revise the certification of the minimum contribution rate(s) should there be any undue delay in the formal signing.

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Report

2017 Actuarial Valuation for Lothian Buses Pension Fund

1. Recommendations

Committee is requested to:

1.1 Note the results of the 2017 Actuarial Valuation report for the Lothian Buses Pension Fund; and

1.2 Note that the Actuary's certification of the results of the actuarial valuation is predicated upon a revised Admission Agreement and Shareholder Guarantee for Lothian Buses plc and he has reserved the right to revise the certification of the minimum contribution rate(s) should there be any undue delay in the formal signing.

2. Background

2.1 The Lothian Buses Pension Fund was established in 1986, under The Local Government Superannuation (Funds) (Scotland) Regulations 1986 (SSI 115/1986), as a sub Fund of Lothian Pension Fund.

2.2 The Lothian Buses Pension Fund is required by law to undertake an actuarial valuation once every three years. Based on data as at 31 March 2017, this actuarial valuation must be completed by 31 March 2018.

2.3 The actuarial valuation of the pension fund has three main purposes:

(a) To assess whether the funding strategy and assumptions are appropriate;

(b) To assess the financial health of the pension fund; and

(c) To set the future rates of contributions payable by the employer.

2.4 As Lothian Buses Pension Fund closed to new members in 2008, the number of active members is reducing and in due course the Fund will consist entirely of deferred and pensioner members. In normal circumstances, on the departure of an admitted body's last active member the admission agreement is terminated, a cessation valuation is undertaken on a prudent basis and any debt is crystallised with no recourse to further employer contributions.

2.5 After discussion with shareholder and the company, the investment strategy review, as reported to Committee in March 2016, assumed that Lothian Buses would continue to pay deficit contributions (if required) after the last active member has left the Fund. The Admission Agreement would be being updated accordingly. The funding position and required employer contributions would be reviewed at triennial actuarial valuation in the normal way. With this clarity, the Fund could continue to adopt a long-term investment approach.

2.6 The investment review was aided by asset liability modelling which highlighted the potential impact of the future funding level volatility on the company's balance sheet and contributions. The largest funding risks identified were those driven by the liability value, which is a function of changes in long term interest rates and inflation, and the equity risk, which is expected to diminish over the very long term.

2.7 In March 2016, Pensions Committee agreed a revised Investment Strategy for 2016-21 reflecting the increasing maturity of the scheme. "The strategy reduces the long-term allocation to equities (including private equity) from 55% to 40% by the end of 2021 and increases the allocation to index-linked gilts from 15% to 20% within the same timeframe. It recognises a gradually changing risk profile for the Fund, but retains significant exposure to real investments, such as index-linked gilts and equities, which have a history of protecting or enhancing purchasing power, after the effects of inflation have been taken into account".

3. Main report

3.1 A copy of the actuarial valuation of the Lothian Buses Pension Fund as at 31 March 2017 is attached at Appendix 1. This provides full details of the financial and demographic assumptions and methodology which have been adopted by the Fund's Actuary. The report is marked as 'Draft' pending the formal approval of the Funding Strategy Statement which is also on Committee's agenda.

Admission Agreement and Shareholder Guarantee

3.2 As previously advised to Pensions Committee, an updated admission agreement for Lothian Buses plc to the Local Government Pension Scheme (LGPS) is currently being progressed. This will reflect regulatory requirements and affirm the guarantor obligations of the company's shareholders in respect of pension liabilities. It is anticipated that this will be formally concluded very shortly.

3.3 In the event of any employer default, which is emphasised is not anticipated, then pension liabilities will be met by the four Lothian Councils in proportion to their respective company shareholding.

3.4 Importantly, this agreement will also allow the company to continue to pay contributions to the Fund after there are no active members.

Liabilities and Funding Level as at 31 March 2017

3.5 Historically, the funding position of the Lothian Buses Pension Fund has been assessed on an ongoing basis, using a discount rate allowing for investment returns in excess of government bond yields. The table below summarises the financial position of the Fund at 31 March 2017 in respect of benefits earned by members up to this date on this basis.

	2014 Ongoing basis	2017 Ongoing basis
Past Service Liabilities £m	289	404
Market Value of Assets £m	337	488
Surplus / (Deficit) £m	48	84
Funding Level %	**117%**	**121%**

3.6 On the ongoing basis, the funding level has risen from 117% at the previous valuation at 31 March 2014 to 121% at this valuation. This has resulted in the surplus of £48million at 31 March 2014 increasing to a surplus of £84million at 31 March 2017. The improvement of the funding position on this basis reflects the favourable conditions since the previous valuation. In particular, investment returns for the three years to 31 March 2017 at 46.8% were significantly higher than anticipated. The table at Page 9 of Appendix 1, “Analysis of change in solvency – ongoing assumptions” illustrates, in totality, the various factors that caused the funding position to improve between 31 March 2014 and 31 March 2017 and the extent of this influence.

3.7 As the Fund has been closed to new entrants since 1 January 2008, inevitably the liabilities will gradually mature. In this context, the funding level has also been measured on a more prudent basis, discounting the liabilities using government bond (gilts) yields at 31 March 2017. This increases the liabilities by £143million and reduces the funding level to 89%. The results on the gilts basis, with comparison to the previous actuarial valuation, are as follows:

	2014 Gilts basis	2017 Gilts basis
Past Service Liabilities £m	382	547
Total – Assets £m	337	488
Surplus / (Deficit) £m	(44)	(59)
Funding Level %	**88%**	**89%**

Contribution Rates

3.8 The theoretical contribution rates calculated by the Actuary, on both funding bases, are shown in the table below.

Contribution rates (% of pay)	**31 March 2014**	**31 March 2017**	**31 March 2014**	**31 March 2017**
	Ongoing		Gilts	
Employer Primary Rate (formerly defined as Future Service Rate)	24.1%	33.1%	34.2%	49.4%
Employer Secondary Rate (formerly defined as Past service adjustment) [1]	-13.0%	-21.9%	11.0%	14.1%
Total employer contribution rate	**11.1%**	**11.2%**	**45.2%**	**63.5%**

[1] Spread over Future Working Lifetime

3.9 As is evident, the difference in the pace of funding between the respective bases and the potential implications for both the company and its shareholders is very significant. Rationale to support the updated Admission Agreement and Shareholder Guarantee is clear.

3.10 At the 2014 actuarial valuation, in recognition of the increasing maturity of the Fund and the need for prudence, the actuary certified minimum contributions of 24.1% of payroll for the period 1 January 2017 – 31 March 2018. Contributions at this level are currently in payment by the company.

3.11 Subject to the conclusion of the revised Admission Agreement and Shareholder Guarantee (as outlined in preceding paragraphs), the Actuary has confirmed that he is content to prescribe minimum employer contributions frozen at the current rate in payment, that is 24.1% of payroll, for the period encompassed by this actuarial valuation, 1 April 2018 to 31 March 2021.

3.12 In support of certification on this basis, the Actuary has further commented:

a. "The shareholders of Lothian Buses Limited acting as guarantors provides considerable security and certainty to the Fund that the cost of the liabilities will be met in full.

b. A 'gilt based' funding target becomes less imminent as the strength of the guarantee should allow the employer to continue to pay contributions after its last active member leaves employment. The investment strategy is planned to become less risky over time, but the funding time horizon would extend beyond the point at which all active members have left employment.

c. The agreed rate lies between the "theoretical" contribution rates at this valuation of 11.2% and 63.5% of pay based on ongoing and gilts assumptions respectively, and a time horizon of around 12 years. Asset and liability projections suggest that the agreed rate provides a strong likelihood of full funding over the longer term."

3.13 The Actuary, therefore, reserves the right to revise the certification of the minimum contribution rate(s) should there be any undue delay in the formal signing of the revised Admission Agreement and Shareholder Guarantee.

Funding Strategy Statement

3.14 A revised Funding Strategy Statement for the Lothian Pension Fund, incorporating the Lothian Buses Pension Fund, is reported separately on this agenda.

Conclusions

3.15 The Actuarial Valuation for the Lothian Buses Pension Fund as at 31 March 2017 has been completed. The funding level on an ongoing basis as at 31 March 2017 was 121%% and on a gilts basis was 89%.

3.16 Minimum contributions from the employer will remain at the current level of 24.1% for the next three years, subject to a revised Admission Agreement and Shareholder Guarantee.

4. Measures of success

4.1 The funding strategy should ensure that the Fund has sufficient assets to meet pension obligations in the long term. The minimum contribution rates payable by the employer are certified by the Fund's Actuary in accordance with the professional standards of the Institute and Faculty of Actuaries.

5. Financial impact

5.1 The actuarial valuation sets the contribution rates payable by the employer over the next three years. The minimum employer contribution rates payable by company are as stated. The company has confirmed its acceptance of these rates.

6. Risk, policy, compliance and governance impact

6.1 The Lothian Buses Pension Fund is required by law to undertake an actuarial valuation once every three years. Regular actuarial assessment of the Fund reduces the risk of not meeting funding objectives.

6.2 The Lothian Buses admission agreement is being updated to reflect regulatory requirements of the Local Government Pension Scheme and to affirm the guarantor obligations of the company's shareholders in respect of pension liabilities.

7. Equalities impact

7.1 There are no equalities implications arising from this report.

8. Sustainability impact

8.1 There are no adverse sustainability impacts arising from this report.

9. Consultation and engagement

9.1 The Pension Board, comprising employer and member representatives, is integral to the governance of the Fund and they are invited to comment on the relevant matters at Committee meetings. Appropriate liaison and consultation with representatives of Lothian Buses plc and the union representative from Lothian Buses has been undertaken.

10. Background reading/external references

10.1 None

Stephen S. Moir

Executive Director of Resources

Contact: John Burns, Chief Finance Officer, Lothian Pension Fund

E-mail: john.burns@edinburgh.gov.uk | Tel: 0131 469 3711

11. Appendices

Appendix 1 - Actuarial Valuation 2017 Lothian Buses Pension Fund

Appendix 1

Lothian Buses Pension Fund

2017 Actuarial Valuation Report

March 2018

DRAFT

Richard Warden
Laura McInroy

Fellows of the Institute and Faculty of Actuaries
For and on behalf of Hymans Robertson LLP

Contents

Executive summary

We have carried out an actuarial valuation of the Lothian Buses Pension Fund (LBPF) as at 31 March 2017. The results are presented in this report and are briefly summarised below.

Funding position

The table below summarises the funding position of the Fund on both ongoing and gilts assumptions as at 31 March 2014 and 31 March 2017:

Ongoing Assumptions

Past Service Position	31 March 2014 (£m)	31 March 2017 (£m)
Past Service Liabilities	289	404
Market Value of Assets	337	488
Surplus / (Deficit)	48	84
Funding Level	**117%**	**121%**

Gilts Assumptions

Past Service Position	31 March 2014 (£m)	31 March 2017 (£m)
Past Service Liabilities	382	547
Market Value of Assets	337	488
Surplus / (Deficit)	(45)	(59)
Funding Level	**88%**	**89%**

The funding level has improved due to positive membership experience and better than anticipated investment returns. These have been partially offset by a reduction in future expected investment returns. Further details are set out in **Section 4**.

Guarantor position and merger

The shareholders of Lothian Buses Limited (City of Edinburgh Council, West Lothian Council, Midlothian Council and East Lothian Council) have agreed to act as guarantor to the liabilities of LBPF. We understand that the admission agreement will be updated to reflect this, and that the agreement will also allow Lothian Buses to continue to pay contributions to the Fund after the last active member leaves (on the premise that a guarantee from the shareholders of Lothian Buses Limited provides a high level of security). A merger of the assets and liabilities of LBPF into the Lothian Pension Fund (LPF) is being considered by the Pensions Committee at its meeting in March 2018. If the merger goes ahead, the associated assets and liabilities of LBPF would be “notionally ring-fenced” from the shareholders’ other assets and liabilities in the LPF and subject to a bespoke investment strategy.

Contribution rates

The Fund has agreed to freeze the current total employer rate at 24.1% of pay over the 3 year period until the next valuation. This decision recognises that:

- The shareholders of Lothian Buses Limited acting as guarantor provides considerable security and certainty to the Fund that the cost of the liabilities will be met in full.
- A ‘gilt based’ funding target becomes less imminent as the strength of the guarantee should allow the employer to continue to pay contributions after its last active member leaves employment. The investment strategy is planned to become less risky over time, but the funding time horizon would extend beyond the point at which all active members have left employment.

- The agreed rate lies between the “theoretical” contribution rates at this valuation of 11.2% and 63.5% of pay based on ongoing and gilts assumptions respectively, and a time horizon of around 12 years. Asset and liability projections suggest that the agreed rate provides a strong likelihood of full funding over the longer term.

The table below summarises the whole fund Primary and Secondary Contribution rates at this triennial valuation:

Primary Rate (% of pay)	Secondary Rate (% of pay)		
1 April 2018 - 31 March 2021	2018/2019	2019/2020	2020/2021
33.1%	- 9.0%	- 9.0%	- 9.0%

At the previous formal valuation at 31 March 2014, a different regulatory regime was in force. Therefore a contribution rate that is directly comparative to the rates above is not provided.

This minimum contribution to be paid from 1 April 2018 to 31 March 2021 is shown in the Rates and Adjustment Certificate in **Appendix D**.

Please note the figures in the tables throughout this document have been rounded. As a result, the sum of figures within the tables may not add up due to rounding.

1 Introduction

The City of Edinburgh Council ("the Administering Authority") has commissioned us to carry out a formal actuarial valuation of the Lothian Buses Pension Fund ("the Fund") as at 31 March 2017 to fulfil its obligations under Regulation 60 of The Local Government Pension Scheme (Scotland) Regulations 2014 ("the Regulations"). Therefore, the totality of our advice in relation to this formal valuation has been addressed to the Administering Authority and it is the only intended user of this advice. All reliances, limitations and caveats, including third party exclusions are set out in Section 7 of this report.

The purpose of the actuarial valuation is to assess the value of the assets and liabilities of the Fund as at 31 March 2017 and to calculate the required rate of employer contributions to the Fund for the period from 1 April 2018 to 31 March 2021. This report summarises the results of the valuation and the underlying advice provided to the Administering Authority throughout the valuation process.

This report is the culmination of various other communications which set out our advice in relation to the valuation, in particular:

- Our 2017 valuation toolkit which set out our proposed valuation methodology;
- Correspondence relating to data including the Data Report dated 5 March 2018;
- The Initial Results report dated 13 November 2017 which outlined the whole fund results and valuation assumptions;
- Correspondence relating to the shareholders of Lothian Buses Limited guarantee and the proposed employer contribution rates;
- The Funding Strategy Statement confirming the approach to setting contribution rates.

2 Valuation Approach

The valuation is a planning exercise for the Fund, to assess the monies needed to meet the benefits owed to its members as they fall due. As part of the valuation process the Fund reviews its funding strategy to ensure that an appropriate contribution plan and investment strategy is in place.

It is important to realise that the actual cost of the pension fund (i.e. how much money it will ultimately have to pay out to its members in the form of benefits) is unknown. This cost will not be known with certainty until the last benefit is paid to the last pensioner. The purpose of this valuation is to estimate what this cost will be, so that the Fund can then develop a funding strategy to meet it.

Setting the funding strategy for a defined benefit pension fund such as the Lothian Buses Pension Fund is complex. Firstly, the time period is very long; benefits earned in the LGPS today will be paid out over a period of the next 80 years or more and it remains open to the accrual of benefits. Secondly, the LGPS remains a defined benefit scheme so there are significant uncertainties in the final cost of the benefits to be paid. Finally, in order to reduce employer costs, the Lothian Buses Pension Fund invests in a return seeking investment strategy which can result in high levels of asset volatility.

Such a valuation can only ever be an estimate as the future cannot be predicted with certainty. However, as actuaries, we can use our understanding of the Fund and the factors that affect it to set the pace of funding in conjunction with the Administering Authority. The pace of this funding can vary according to the level of prudence that is built into the valuation method and assumptions.

The shareholders of Lothian Buses Limited (City of Edinburgh Council, West Lothian Council, Midlothian Council and East Lothian Council) have agreed to act as guarantor to the Lothian Buses Pension Fund liabilities. We understand that the admission agreement will be updated to reflect this, and that the agreement will also allow Lothian Buses to continue to pay contributions to the Fund after the last active member leaves (on the premise that a guarantee from the shareholders of Lothian Buses Limited provides a high level of security). This provides considerable certainty to the Fund that the cost of the liabilities will be met in full and more flexibility in the pace of funding the liabilities.

For this valuation, as for the previous valuation, our calculations identify separately the expected cost of members' benefits in respect of scheme membership completed before the valuation date ("past service") and that which is expected to be completed after the valuation date ("future service").

Past service

The principal measurement here is the comparison of the funding position at the valuation date against the funding target. The market value of the Fund's assets as at the valuation date is compared against the value placed on the Fund's liabilities in today's terms (calculated using a market-based approach). By maintaining a link to the market in both cases, this helps ensure that the assets and liabilities are valued in a consistent manner. Our calculation of the Fund's liabilities also explicitly allows for expected future pay and pension increases. The assumptions used in the assessment of the funding position at the valuation date are detailed in the next section.

The funding level is the ratio of assets to liabilities at the valuation date. A funding level of less/more than 100% implies that there is a deficit/surplus in the Fund at the valuation date against the funding target.

Funding plans are set to eliminate any deficit (or surplus) over the set time horizon and therefore get back to a funding level of 100%. To do so, additional contributions may be required to be paid into the Fund; these contributions are known as the "secondary rate".

Future service

In addition to benefits that have already been earned by members prior to the valuation date, employee members will continue to earn new benefits in the future. The cost of these new benefits must be met by both employers and employees. The employers' share of this cost is known as the "primary rate".

The primary rate is determined with the aim of meeting the funding target in respect of these new benefits at the end of the set time horizon. The primary rate will depend on the profile of the membership (amongst other factors). For example, the rate is higher for older members as there is less time to earn investment returns before the member's pension comes into payment.

For valuation results for the Fund, I have calculated the future service rate as the cost of benefits members will earn over the entirety of their remaining working lifetime, taking account of expected future salary increases until retirement and revaluation of accrued CARE benefits in line with CPI. This funding method is known as the Attained Age Method and is appropriate for funds which are no longer admitting new entrants.

For the reasons outlined above regarding the uncertainty of the future, there is no guarantee that the amount paid for the primary rate will be sufficient to meet the cost of the benefits that accrue. Similarly, there is no guarantee that the secondary contributions will result in a 100% funding level at the end of the time horizon.

Benefits

The scheme rules and benefits are set out in the Regulations. For further details, please refer to the timeline regulations on http://www.scotlgpsregs.org/.

3 Assumptions

Due to the long term nature of the Fund, assumptions about the future are required to place a value of the benefits earned to date and the cost of benefits that will be earned in the future. These assumptions broadly fall into two categories – financial and demographic.

Financial assumptions

Financial assumptions relate to the **size** of members' benefits. For example, how members' pensions will increase over time. In addition, the financial assumptions also help us to estimate how much members' benefits will cost the Fund in today's money by making an assumption about the return on the Fund's investments in future.

For measuring the funding level, the liabilities of the Fund are reported on a single set of financial assumptions about the future, based on financial market data as at 31 March 2017.

Discount rate

In order to place a current value on the future benefit payments from the Fund, an assumption about future investment returns is required in order to "discount" future benefit payments back to the valuation date.

For a funding valuation such as this, the discount rate is required by Regulations to incorporate a degree of prudence. The discount rate is set by taking into account the Fund's current and expected future investment strategy and, in particular, how this strategy is expected to outperform the returns from Government bonds over the long term. The additional margin for returns in excess of that available on Government bonds is called the Asset Outperformance Assumption (AOA).

The selection of an appropriate AOA is a matter of judgement and the degree of risk inherent in the Fund's investment strategy should always be considered as fully as possible. Following discussion the Fund is satisfied that an AOA of 1.5% p.a. is a prudent assumption for the purposes of this valuation. An AOA of 1.5% was used at the 2014 valuation.

Results using an AOA of 0.0% p.a. have also been provided. These recognise the plan to reduce the degree of risk included in the Fund's investment strategy.

Price inflation / benefit increases

Benefit increases are awarded in line with the Consumer Prices Index (CPI). As there continues to be no deep market for CPI linked financial instruments, the Fund derives the expected level of future CPI with reference to the Retail Prices Index (RPI).

Similar to previous valuations, the assumption for RPI is derived as the difference between the yield on long dated fixed interest and index-linked government bonds. In line with recent experience and projections by the Bank of England, CPI is expected to be, on average, 1.0% lower than RPI over the long term (compared to 0.8% as at the 2014 valuation).

Salary increases

Due to the change to a CARE scheme from 2015, there is now a closed group of membership in the Fund with benefits linked to final salary. The run-off of this final salary linked liability was modelled, taking into account the short-term restrictions in public sector pay growth. The results of this modelling and analysis were reported in the "2017 valuation – Pay growth assumption" paper on 8 September 2017. Based on the results of this modelling the Fund set a salary growth assumption of RPI plus 0.7% (compared to 2.0% p.a. for two years, and 1.5% above RPI thereafter at the 2014 valuation).

A summary of the financial assumptions underpinning the target funding basis and adopted during the assessment of the liabilities of the Fund as at 31 March 2017 (alongside those adopted at the last valuation for comparison) are shown below.

Financial assumptions	31 March 2014	31 March 2017
Discount rate (p.a.)		
Return on long-dated gilts	3.5%	1.7%
Asset Outperformance Assumption*	1.5%	1.5%
Discount rate	**5.0%**	**3.2%**
Benefit increases (p.a.)		
Retail Prices Inflation (RPI)	3.5%	3.4%
Assumed RPI/CPI† gap*	(0.8%)	(1.0%)
Benefit increase assumption (CPI)	**2.7%**	**2.4%**
Salary increases (p.a.)		
Retail Prices Inflation (RPI)	3.5%	3.4%
Increases in excess of RPI*	1.5%	0.7%
Salary increase assumption*	**5.0%***	**4.1%**

† Consumer Prices Index

**Applied arithmetically in 2014 and geometrically in 2017*

*** 2.0% p.a. for 2014/15 and 2015/16, reverting to 5.0% thereafter*

**** excluding promotional increases*

Demographic assumptions

Demographic assumptions typically try to forecast when benefits will come into payment and what form these will take. For example, when members will retire (e.g. at their normal retirement age or earlier), how long they will then survive and whether a dependant's pension will be paid.

Longevity

The main demographic assumption to which the valuation results are most sensitive is that relating to the longevity of the Fund's members. The longevity assumptions result in the following typical future life expectancies from age 65 (figures for 2014 are shown for comparison):

	31 March 2014	31 March 2017
Male		
Pensioners	20.4 years	19.7 years
Non-pensioners	23.5 years	21.9 years
Female		
Pensioners	22.6 years	22.3 years
Non-pensioners	25.9 years	24.8 years

Further details of the longevity assumptions adopted for this valuation can be found in **Appendix B**. Note that the figures for non-pensioners assume they are aged 45 at the valuation date.

Retirement age pattern

We have adopted the retirement age pattern assumption as specified by the England and Wales LGPS Scheme Advisory Board for preparing Key Performance Indicators.

Other demographic assumptions

We are in the unique position of having a very large local authority data set from which to derive our other demographic assumptions. We have analysed the trends and patterns that are present in the membership of local authority funds and tailored our demographic assumptions to reflect LGPS experience. Details of the other demographic assumptions adopted by the Fund are set out in **Appendix B**.

Further comments on the assumptions

We are required to include a degree of prudence within the valuation. This has been achieved by explicitly allowing for a margin of prudence in the discount rate. All other proposed assumptions represent our "best estimate" of future experience.

If the discount rate was chosen to be best estimate (i.e. to have a 50% probability that the Fund's current investment strategy will outperform the chosen discount rate over the longer term), the pre and post retirement discount rate would be around 5% p.a.

4 Results

The Administering Authority has prepared a Funding Strategy Statement which sets out its funding objectives for the Fund. In broad terms, the main valuation objectives are to hold sufficient assets in the Fund to meet the assessed cost of members' accrued benefits on the target funding basis ("the Funding Objective") and to set employer contributions which ensure both the long term solvency and the long term cost efficiency of the Fund ("the Contribution Objective").

Funding Position Relative to Funding Target

In assessing the extent to which the Funding Objective was met at the valuation date, we have used the ongoing actuarial assumptions described in the previous section of this report for the target funding basis and the funding method also earlier described. The table below compares the value of the assets and liabilities at 31 March 2017. The 31 March 2014 results are also shown for reference.

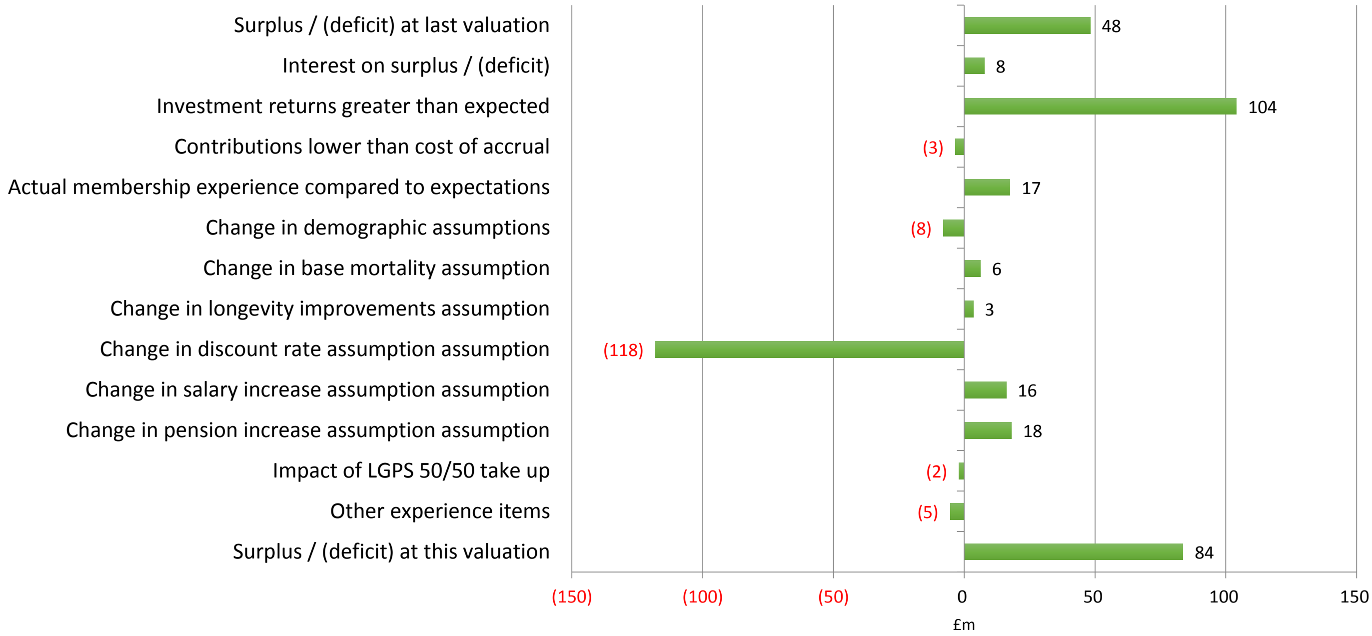
A funding level of 100% would correspond to the Funding Objective being met at the valuation date.

Valuation Date	31 March 2014	31 March 2017
Past Service Liabilities	**(£m)**	**(£m)**
Actives (CARE)	-	21
Actives (Final Salary)	139	182
Deferred Pensioners	41	59
Pensioners	109	142
Total Liabilities	**289**	**404**
Assets	**337**	**488**
Surplus / (Deficit)	**48**	**84**
Funding Level	**117%**	**121%**

The Funding Objective was met. There was a surplus of assets relative to the assessed cost of members' benefits on the target funding basis of £84m.

Summary of changes to the funding position

The chart below illustrates the factors that caused the changes in the funding position between 31 March 2014 and 31 March 2017:



Further comments on this chart are set out below:

- There is an interest gain of £8m. This is broadly three years of compound interest at 5.0% p.a. applied to the previous valuation surplus of £48m.
- Investment returns being higher than expected since 2014 lead to a gain of £104m. This is roughly the difference between the actual three-year return (46.8%) and expected three-year return (15.8%) applied to the whole fund assets from the previous valuation of £337m, with a further allowance made for cashflows during the period.
- The impact of the change in demographic assumptions has been a loss of around £8m.
- The change in longevity assumptions (baseline and improvements) has given rise to a gain of £9m.
- The change in financial assumptions since the previous valuation has led to a loss of £84m. The approximate impact of changing each financial assumption in turn has been as follows:
  - Changing the discount rate leads to a loss of £118m.
  - Changing the salary increase assumption leads to a gain of £16m.
  - Changing the pension increase assumption leads to a gain of £18m.

  As can be seen from the figures above, the impact of the decrease in the real discount rate between 2014 and 2017 has been partially offset by the increase to 1.0% p.a. of the assumed gap between RPI and CPI and a reduction in the expected future salary growth for benefits linked to final salary
- Membership experience over the 3 years has led to a gain of £17m. The most material items of membership experience have been:
  - Lower than expected salary increases leading to a gain of £5m
  - Lower than expected pension increases leading to gain of £10m
  - Lower than expected ill health retirements leading to a gain of £1m.

Projection of the funding position

The progression of the funding position will depend on various factors including future asset performance, economic conditions and membership movements. If the financial and demographic assumptions we have made at this valuation are borne out in practice, and there are no changes to the valuation assumptions, we project that the funding level at the 2020 valuation date will be 118%. This allows for contributions to be paid as detailed below and assumes returns in line with the discount rate adopted for this valuation. No allowance has been made for the future de-risking of the investment strategy.

Employer Contribution Rates

The Contribution Objective is achieved by setting employer contributions which are likely to be sufficient to meet both the cost of new benefits accruing and to address any funding surplus or deficit relative to the funding target over the agreed time horizon. A secondary objective is to maintain relatively stable employer contribution rates.

The shareholders of Lothian Buses Limited have agreed to act as guarantor to the Lothian Buses Pension Fund liabilities. We understand that the admission agreement will be updated to reflect this, and that the agreement will also allow Lothian Buses to continue to pay contributions to the Fund after the last active member leaves (on the premise that a guarantee from the shareholders of Lothian Buses Limited provides a high level of security). This provides considerable certainty to the Fund that the cost of the liabilities will be met in full and more flexibility in the pace of funding the liabilities.

Taking the guarantee into account, the employer contribution rates from 1 April 2018 are set out in the Rates and Adjustments Certificate shown in **Appendix D.**

The table below summarises the whole fund Primary and Secondary Contribution rates at this valuation.

Primary Rate (% of pay)	Secondary Rate (% of pay)		
1 April 2018 - 31 March 2021	2018/2019	2019/2020	2020/2021
33.1%	- 9.0%	- 9.0%	- 9.0%

The total rate has been agreed by the Fund to be frozen at the current rate of 24.1% covering the three year period from 1 April 2018 to 31 March 2021. This includes an allowance of 0.3% of pensionable pay for the Fund's expenses.

The Fund's "Common Contribution rate" as at 31 March 2014 based on ongoing assumptions was 11.1% of pay. Due to changes in the regulatory regime and guidance on contribution rates, the "Common Contribution rate" terminology is no longer appropriate. However, for comparison purposes only, the following table shows the "theoretical" contribution rates that would be payable from 1 April 2018 using the ongoing assumptions outlined in Section 3, with 2014 figures shown for comparison:

Ongoing basis	31 March 2014 (% of pay)	31 March 2017 (% of pay)
Employer Primary Rate (incl expenses)	24.1%	33.1%
Employer Secondary Rate (spread over FWL*)	(13.0%)	(21.9%)
Total employer rate (incl. expenses)	**11.1%**	**11.2%**

**Future working lifetime: 11.7 years in 2014, 11.8 years in 2017*

Solvency Results using Gilts Assumptions

The current investment strategy of the Fund includes a high proportion of equity type assets (such as equities and property). In the long term, it is expected that such assets will outperform gilts, which are generally considered to be a closer match to the future benefit outflows of the Fund. The scale of this outperformance is a matter of judgement based on available evidence. In deriving the discount rate for the purposes of this valuation, we have assumed that the assets held by the Fund will outperform index-linked gilts by 1.5% p.a.. We consider this to be a prudent assumption.

However, over time the Fund will mature and it is likely that the investment strategy will “de-risk” as the employer (which is closed to new entrants) moves closer to exit. The following table shows the effect on the valuation results if no advance credit is taken for additional outperformance above gilt returns (i.e. if a ‘gilts basis’ was used to value the liabilities).

Valuation Date	31 March 2014	31 March 2017
Past Service Liabilities	**(£m)**	**(£m)**
Actives (CARE)	-	31
Actives (Final Salary)	196	261
Deferred Pensioners	57	83
Pensioners	128	171
Total Liabilities	**382**	**547**
Assets	**337**	**488**
Surplus / (Deficit)	**(45)**	**(59)**
Funding Level	**88%**	**89%**

The Fund’s “Common Contribution rate” as at 31 March 2014 based on gilts assumptions was 45.2% of pay. Due to changes in the regulatory regime and guidance on contribution rates, the “Common Contribution rate” terminology is no longer appropriate. However, for comparison purposes only, the following table shows the “theoretical” contribution rates that would be payable from 1 April 2018 using gilts assumptions, with 2014 figures shown for comparison:

Gilts basis	31 March 2014 (% of pay)	31 March 2017 (% of pay)
Employer Primary Rate (incl expenses)	34.2%	49.4%
Employer Secondary Rate (spread over FWL*)	11.0%	14.1%
Total employer rate (incl. expenses)	**45.2%**	**63.5%**

**Future working lifetime: 11.7 years in 2014, 11.8 years in 2017*

5 Risk Assessment

The valuation results depend critically on the actuarial assumptions that are made about the future of the Fund. If all of the assumptions made at this valuation were exactly borne out in practice then the results presented in this document would represent the true cost of the Fund as it currently stands at 31 March 2017.

However, no one can predict the future with certainty and it is unlikely that future experience will exactly match the assumptions. The future therefore presents a variety of risks to the Fund and these should be considered as part of the valuation process. In particular:

- The main risks to the financial health of the Fund should be **identified**.
- Where possible, the financial significance of these risks should be **quantified**.
- Consideration should be given as to how these risks can then be **controlled** or **mitigated**.
- These risks should then be **monitored** to assess whether any mitigation is actually working.

This section investigates the potential implications of the actuarial assumptions not being borne out in practice.

Set out below is a brief assessment of the main risks and their effect on the valuation past service funding position results.

Sensitivity of past service funding position results to changes in assumptions

The table below gives an indication of the sensitivity of the funding position to small changes in two of the main financial assumptions used:

Discount Rates (p.a.)	Benefit Increases (p.a.)			
	2.7%	2.4%	2.1%	
2.7%	35 108%	54 112%	72 117%	(Deficit) Funding Level
3.2%	66 116%	84 121%	101 126%	(Deficit) Funding Level
3.7%	95 124%	111 129%	127 135%	(Deficit) Funding Level

The valuation results are also very sensitive to unexpected changes in future longevity. All else being equal, if longevity improves in the future at a faster pace than allowed for in the valuation assumptions, the funding level will decline and the required employer contribution rates will increase.

The proposed valuation assumption assumes that in the longer term mortality rates will improve at a rate of 1.25% each year. The more prudent assumptions shown for sensitivity analysis assumes that mortality rates will improve at a rate of 1.5% each year in the longer term.

	1.25% long term rate of improvement	1.5% long term rate of improvement
Surplus	84	79
Funding Level	121%	119%

This is not an exhaustive list of the assumptions used in the valuation. For example, changes to the assumed level of withdrawals and ill health retirements will also have an effect on the valuation results.

Note that the tables show the effect of changes to each assumption in isolation. In reality, it is perfectly possible for the experience of the Fund to deviate from more than one of our assumptions simultaneously and so the precise effect on the funding position is therefore more complex. Furthermore, the range of assumptions shown here is by no means exhaustive and should not be considered as the limits of how extreme experience could actually be.

Funding risks

The Fund is exposed to a number of risks. These include, but are not limited to:

- Market risks – these include investment returns being less than anticipated or liabilities increasing more than expected due to changes in market conditions underlying the financial assumptions (e.g. inflation or pay increases above that assumed in **Section 3**).
- Demographic risks – these include anything that affects the timing or type of benefits (e.g. members living longer than anticipated, fewer members opting into the 50/50 option, etc.). In particular, early retirement on ill-health grounds can result in significant funding strains.
- Regulatory risks – changes in the Regulations could materially affect the benefits that members become entitled to. It is difficult to predict the nature of any such changes but it is not inconceivable that they could affect not just the cost of benefits earned after the change but could also have a retrospective effect on the past service position.
- Administration and Governance risks – failures in administration processes can lead to incorrect actuarial calculations. For example, where membership data is not up to date (e.g. leaver forms not being submitted in a timely matter) material inaccuracies in respect of the level of deficit and contributions may occur at future valuations
- Environmental risks – i.e. risks relating to environmental changes, and their impact on the Fund employer and investments: such risks exist and may prove to be material. Given the lack of relevant quantitative information available specifically relevant to the Fund, we have not explicitly incorporated such risks in our advice on the 2017 valuation. The Administering Authority and the Employer may wish to seek direct advice on these risks.

Investment risk

The Fund holds some of its assets in return seeking assets such as equities to help reduce employers' costs. However, these types of investments can result in high levels of asset volatility. Therefore, there is a risk that future investment returns are below expectations and the funding target is not met. This will require additional contributions from the Employer to fund any deficit.

Whilst the Fund takes steps to ensure that the level of investment risk is managed and monitored via strategy reviews and performance monitoring, it can never be fully mitigated.

Managing the risks

Whilst there are certain things, such as the performance of investment markets or the life expectancy of members, that are not directly within the control of the pension fund, that does not mean that nothing can be done to understand them further and to mitigate their effect. Although these risks are difficult (or impossible) to eliminate, steps can be taken to manage them.

Ways in which some of these risks can be managed could be:

- Set aside a specific reserve to act as a cushion against adverse future experience (possibly by selecting a set of actuarial assumptions that are deliberately more prudent).
- Take steps internally to monitor the decisions taken by members (e.g. 50:50 scheme take-up, commutation) and the employer (e.g. relating to early / ill health retirements or salary increases) in a bid to curtail any adverse impact on the Fund.
- Undertake an asset-liability modelling exercise that investigates the effect on the Fund of possible investment scenarios that may arise in the future.

- Managing ill health liabilities e.g. via ill health “budgets” or external insurance, to mitigate the risk of an ill health retirement impacting on the funding level.
- Regularly reviewing the Fund’s membership data to ensure it is complete, up to date and accurate.

6 Related issues

The Fund's valuation operates within a broader framework, and this document should therefore be considered alongside the following:

- the Funding Strategy Statement, which in particular highlights how the Employer has its contributions calculated;
- the Statement of Investment Principles (e.g. the discount rate must be consistent with the Fund's asset strategy);
- the general governance of the Fund, such as meetings of the Pensions Committee, decisions delegated to officers, the Fund's business plan, etc;
- the Fund's risk register.

Further recommendations

Valuation frequency

Under the provisions of the LGPS regulations, and subject to any merger of the Fund into the Lothian Pension Fund, the next formal valuation of the Fund is due to be carried out as at 31 March 2020. In light of the uncertainty of future financial conditions, we recommend that the financial position of the Fund is monitored by means of interim funding reviews. This will give early warning of changes to funding positions and possible revisions to funding plans.

Investment strategy and risk management

We recommend that the Administering Authority continues to regularly review its investment strategy and ongoing risk management programme.

7 Reliances and limitations

Third parties

This document has been prepared for the sole use of City of Edinburgh Council in its role as Administering Authority of the Fund and not for any other third party. Hymans Robertson LLP makes no representation or warranties to any third party as to the accuracy or completeness of this report. This report will therefore not address the particular interests or concerns of any such third party.

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Component reports

As set out in **Section 1** and **Section 6**, the totality of our advice pertaining to the valuation is set out over a number of component communications and complies with the various professional and regulatory requirements related to public sector actuarial valuations in Scotland. The reliances, limitations and caveats within this report and each component report apply equally across the totality of our advice.

Model limitations

The models used to calculate the assets, liabilities, contribution rates and the level of indemnity make some necessary simplifying assumptions. I do not consider these simplifications to be material and I am satisfied that they are appropriate for the purposes described in this report.

Limited purpose

This document has been prepared to fulfil the statutory obligations of the Administering Authority to carry out a formal actuarial valuation. None of the figures should be used for accounting purposes (e.g. under FRS102 or IAS19) or for any other purpose (e.g. a termination valuation under Regulation 62).

Reliance on data

The results of the valuation are dependent on the quality of the data provided to us by the Administering Authority for the specific purpose of this valuation. We have previously issued a separate report confirming that the data provided is fit for the purposes of this valuation and have commented on the quality of the data provided. The data used in our calculations is as per our report of 5 March 2018.

Actuarial standards

The following Technical Actuarial Standards[1] are applicable in relation to this report and have been complied with:

- TAS 100 – Principles for technical actuarial work;
- TAS 300 – Pensions.

No material deviations have been made from the above actuarial standards.

[1] Technical Actuarial Standards (TASs) are issued by the Financial Reporting Council (FRC) and set standards for certain items of actuarial work, including the information and advice contained in this report.

Compliance statement

The totality of our advice complies with the Regulations as they pertain to actuarial valuations.

Richard Warden

Fellow of the Institute and Faculty of Actuaries

For and on behalf of Hymans Robertson LLP

13 March 2018

Laura McInroy

Fellow of the Institute and Faculty of Actuaries

Appendix A: Data

This section contains a summary of the membership, investment and accounting data provided by the Administering Authority for the purposes of this valuation (the corresponding membership and investment data from the previous valuation is also shown for reference). For further details of the data, and the checks and amendments performed in the course of this valuation, please refer to our separate data report.

Membership data – whole fund

Employee members

	31 March 2014		31 March 2017		
	Number	Pensionable Pay* (£000)	Number	Pensionable Pay* (£000)	CARE Pot (£000)
Total employee membership	1,193	32,655	1,070	31,292	1,274

*actual pay (not full-time equivalent)

Deferred pensioners

	31 March 2014		31 March 2017	
	Number	Deferred pension (£000)	Number	Deferred pension (£000)
Total deferred membership	1,252	2,412	1,079	2,554

The figures above also include any "frozen refunds" and "undecided leavers" members at the valuation date.

Current pensioners, spouses and children

	31 March 2014		31 March 2017	
	Number	Pension (£000)	Number	Pension (£000)
Members	1,183	6,705	1,273	7,589
Dependants	309	873	342	1,011
Children	19	26	14	20
Total pensioner members	**1,511**	**7,605**	**1,629**	**8,620**

Note that the membership numbers in the table above refer to the number of records provided to us and so will include an element of double-counting in respect of any members who are in receipt (or potentially in receipt of) more than one benefit.

Membership Profile	Average Age (years)		FWL (years)	
	2014	2017	2014	2017
Employees (CARE)	-	51.2	11.7	11.8
Employees (Final Salary)	52.0	52.0		
Deferred Pensioners	50.9	51.6	-	-
Pensioners	67.4	67.4	-	-

The average ages are weighted by liability.

The expected future working lifetime (FWL) indicates the anticipated length of time that the average employee member will remain as a contributor to the Fund. Note that it allows for the possibility of members leaving, retiring early or dying before retirement.

Assets at 31 March 2017

A summary of the Fund's assets provided by the Administering Authority (excluding members' money-purchase Additional Voluntary Contributions) as at 31 March 2017 and 31 March 2014 is as follows:

Asset class	31 March 2014 (Market Value) (£000)	Allocation %	31 March 2017 (Market Value) (£000)	Allocation %
UK equities	0	0%	0	0%
UK fixed interest gilts	24	7%	30	6%
UK corporate bonds	1	0%	7	1%
UK index-linked gilts	37	11%	74	15%
Overseas equities	219	65%	273	57%
Overseas bonds	0	0%	0	0%
Property	46	14%	89	18%
Cash and net current assets	9	3%	15	3%
Total	**337**	**100%**	**488**	**100%**

Note that, for the purposes of determining the funding position at 31 March 2017, the asset value we have used also includes the present value of expected future early retirement strain payments (amounting to £0m).

Accounting data – revenue account for the three years to 31 March 2017

Consolidated accounts (£000)	Year to 31 March 2015	Year to 30 March 2016	Year to 31 March 2017	Total
Income				
Employer - normal contributions	7,094	7,538	7,731	22,363
Employer - additional contributions	0	0	0	0
Employer - early retirement and augmentation strain contributions	0	0	0	0
Employee - normal contributions	2,139	2,104	2,035	6,278
Employee - additional contributions	23	25	25	73
Transfers In Received (including group and individual)	0	0	10	10
Other Income	0	0	0	0
Total Income	**9,256**	**9,667**	**9,801**	**28,724**
Expenditure				
Gross Retirement Pensions	7,790	8,087	8,425	24,302
Lump Sum Retirement Benefits	2,864	2,101	3,277	8,242
Death in Service Lump sum	262	530	295	1,087
Death in Deferment Lump Sum	0	0	0	0
Death in Retirement Lump Sum	0	0	0	0
Gross Refund of Contributions	0	2	9	11
Transfers out (including bulk and individual)	17	129	418	564
Fees and Expenses	112	102	98	312
Total Expenditure	**11,045**	**10,951**	**12,522**	**34,518**
Net Cashflow	**-1,789**	**-1,284**	**-2,721**	**-5,794**
Assets at start of year	**337,125**	**385,784**	**394,431**	**337,125**
Net cashflow	**-1,789**	**-1,284**	**-2,721**	**-5,794**
Change in value	**50,448**	**9,931**	**96,433**	**156,812**
Assets at end of year	**385,784**	**394,431**	**488,143**	**488,143**
Approximate rate of return on assets	**15.0%**	**2.6%**	**24.5%**	**46.9%**

Note that the figures above are based on the Fund accounts provided to us for the purposes of this valuation, which were fully audited at the time of our valuation calculations.

Appendix B: Assumptions

Financial assumptions

Financial assumptions	31 March 2014 (% p.a.)	31 March 2017 (% p.a.)
Discount rate	5.0%	3.2%
Price inflation (CPI)	2.7%	2.4%
Pay increases*	5.0%**	4.1%
Pension increases:		
pension in excess of GMP	2.7%	2.4%
post-88 GMP	2.7%	2.4%
pre-88 GMP	0.0%	0.0%
Revaluation of deferred pension	2.7%	2.4%
Revaluation of accrued CARE pension	2.7%	2.4%
Expenses	0.3%	0.3%

*An allowance is also made for promotional pay increases (see table below).

**2.0% p.a. for 2014/15 and 2015/16, reverting to 5.0% p.a. thereafter.

Longevity assumptions

As the fund is a member of Club Vita, the baseline longevity assumptions are a bespoke set of Vita Curves that are tailored to fit the membership profile of the Fund. These curves are based on the data the Fund has provided us with for the purposes of this valuation and incorporate an allowance for the results of the Bus & Coach Scheme Longevity Study undertaken by Club Vita in 2016. Full details of these are available on request.

We have also allowed for future improvements in mortality based on the CMI 2016 model with an allowance for smoothing of recent mortality experience and a long term rate of improvement of 1.25% p.a.

Other demographic valuation assumptions

Retirements in normal health	We have adopted the retirement age pattern assumption as specified by the LGPS Scheme Advisory Board in England & Wales for preparing their Key Performance Indicators. Further details about this assumption are available on request.
Retirements in ill health	Allowance has been made for ill-health retirements before Normal Pension Age (see table below).
Withdrawals	Allowance has been made for withdrawals from service (see table below).
Family details	A varying proportion of members are assumed to be married (or have an adult dependant) at retirement or on earlier death. For example, at age 60 this is assumed to be 90% for males and 85% for females. Husbands are assumed to be 3 years older than wives.
Commutation	50% of future retirements elect to exchange pension for additional tax free cash up to HMRC limits for service to 1 April 2009 (equivalent 75% for service from 1 April 2009).
50:50 option	0.0% of members will choose the 50:50 option.

The tables below show details of the assumptions actually used for specimen ages. The promotional pay scale is an annual average for all employees at each age. It is in addition to the allowance for general pay inflation described above. For membership movements, the percentages represent the probability that an individual at each age leaves service within the following twelve months. The abbreviations FT and PT refer to full-time and part-time respectively.

Males

Age	Salary Scale	Incidence per 1000 active members per annum						
		Death Before Retirement	Withdrawals		Ill Health Tier 1		Ill Health Tier 2	
		FT & PT	FT	PT	FT	PT	FT	PT
20	105	0.27	96.58	223.33	0.00	0.00	0.00	0.00
25	117	0.27	63.79	147.52	0.15	0.02	0.13	0.02
30	131	0.32	45.25	104.64	0.28	0.04	0.23	0.03
35	144	0.38	35.35	81.74	0.55	0.18	0.46	0.15
40	150	0.64	28.44	65.77	0.83	0.30	0.69	0.24
45	157	1.07	23.28	53.82	1.32	0.59	1.09	0.49
50	162	1.72	18.03	41.69	2.48	1.38	2.59	1.45
55	162	2.68	17.32	40.05	7.77	5.17	4.67	3.11
60	162	4.83	15.43	35.67	13.21	9.05	3.87	2.65
65	162	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Females

Age	Salary Scale	Incidence per 1000 active members per annum						
		Death Before Retirement	Withdrawals		Ill Health Tier 1		Ill Health Tier 2	
		FT & PT	FT	PT	FT	PT	FT	PT
20	105	0.14	76.49	129.80	0.00	0.00	0.00	0.00
25	117	0.14	51.45	87.32	0.19	0.16	0.15	0.13
30	131	0.21	43.12	73.18	0.25	0.21	0.21	0.18
35	144	0.34	37.19	63.11	0.48	0.40	0.40	0.33
40	150	0.55	30.93	52.49	0.72	0.60	0.60	0.50
45	157	0.89	25.46	43.21	0.96	0.80	0.79	0.66
50	162	1.30	19.40	32.93	1.76	1.44	1.84	1.51
55	162	1.71	18.15	30.80	6.43	5.22	3.87	3.14
60	162	2.19	14.59	24.76	13.55	10.94	3.97	3.20
65	162	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix C: Events since valuation date

Post-valuation events

These valuation results are in effect a snapshot of the Fund as at 31 March 2017. Since that date, various events have had an effect on the financial position of the Fund. Whilst we have not explicitly altered the valuation results to allow for these events, a short discussion of these "post-valuation events" can still be beneficial in understanding the variability of pension funding.

In the period from the valuation date to early March 2018, the Fund asset returns have been higher than expected and real gilt yields have risen (giving lower liabilities). As a result of this, the funding position is expected to have improved since 31 March 2017.

It should be noted that the above is for information only: the figures in this report have all been prepared using membership data, audited asset information and market-based assumptions all as at 31 March 2017. In particular, we do not propose amending any of the contribution rates listed in the Rates and Adjustments Certificate on the basis of these market changes.

Appendix D: Rates and adjustments certificate

In accordance with regulation 60(4) of the Regulations we have made an assessment of the contributions that should be paid into the Fund by participating employers for the period 1 April 2018 to 31 March 2021 in order to maintain the solvency of the Fund.

The method and assumptions used to calculate the contributions set out in the Rates and Adjustments certificate are detailed in the Funding Strategy Statement dated TBC and our report on the actuarial valuation dated TBC.

Regulation 60(8) requires a statement of the assumptions on which the certificate is given regarding the number of members, and the associated of liabilities arising, who will become entitled to payment of pensions under the regulations of the LGPS. These assumptions can be found in Appendix D of the 31 March 2017 formal valuation report dated TBC. These assumptions cover members who become entitled to payment of pension via normal retirement and ill health retirement. Further members will become entitled due to involuntary early retirement (for redundancy and efficiency reasons) for which no allowance has been made.

The required minimum contribution rates are set out below.

Primary rate (% of pay) 1 April 2018 to 31 March 2021	Minimum Contributions for the Year Ending					
	Secondary Rate			Total Contribution Rate		
	2018/2019	2019/2020	2020/2021	2018/2019	2019/2020	2020/2021
33.1%	- 9.0%	- 9.0%	- 9.0%	24.1%	24.1%	24.1%

Notes:

1. Contributions should be paid into Lothian Buses Pension Fund (‘the Fund’) at a frequency in accordance with the requirements of the Regulations.
2. Further sums should be paid to the Fund to meet the costs of any non-ill health early retirements and/or augmentations (i.e. additional pension) using methods and factors issued by me from time to time, or GAD guidance if I consider it to be appropriate.
3. In addition, further sums may be required to be paid to the Fund by the Employer to meet the capital costs of any ill-health retirements that exceed those included within my assumptions.
4. The certified contribution rates represent the minimum level of contributions to be paid. The Employer may pay further amounts at any time, and future periodic contributions may be adjusted on a basis approved by the Fund actuary.

Signature:		
Date:	13 March 2018	13 March 2018
Name:	Richard Warden	Laura McInroy
Qualification:	Fellow of the Institute and Faculty of Actuaries	Fellow of the Institute and Faculty of Actuaries
Firm:	Hymans Robertson LLP	Hymans Robertson LLP
	20 Waterloo Street	20 Waterloo Street
	Glasgow	Glasgow
	G2 6DB	G2 6DB