The Highland Council Pension Fund

2017 Actuarial Valuation Report

March 2018

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For and on behalf of Hymans Robertson LLP

Contents

Executive summary

We have carried out an actuarial valuation of The Highland Council Pension Fund 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 as at 31 March 2014 and 31 March 2017:

Past Service Position	31 March 2014 (£m)	31 March 2017 (£m)
Past Service Liabilities	1,331	1,755
Market Value of Assets	1,279	1,768
Surplus / (Deficit)	(52)	13
Funding Level	**96%**	**101%**

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**.

Contribution rates

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

Primary Rate (% of pay)	Secondary Rate (£)		
1 April 2018 - 31 March 2021	2018/19	2019/20	2020/21
17.8%	£3,973,000	£4,108,000	£4,248,000

The Primary Rate includes an allowance of 0.6% of pensionable pay for the Fund's expenses. The average employee contribution rate is 6.0% of pay.

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.

The minimum contributions to be paid by each employer from 1 April 2018 to 31 March 2021 are shown in the Rates and Adjustments Certificate in **Appendix F**.

1 Introduction

The Highland Council ("the Administering Authority") has commissioned us to carry out a formal actuarial valuation of The Highland Council 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 employers' 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 6 November 2017;
- The Initial Results report dated 6 November 2017 which outlined the whole fund results and proposed valuation assumptions;
- The contribution modelling carried out for employers, and the asset liability modelling carried out for the Fund, as detailed in our report and presentation to the Administering Authority of 7 November 2017;
- The Employer Results Schedules and Employer Results Report which set out our recommended employer contribution rates; and
- The Funding Strategy Statement, confirming the different contribution rate setting approaches for different types of employer or in different circumstances.

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 an open defined benefit pension fund such as The Highland Council 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 new joiners and 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 Highland Council 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 valuation approach adopted recognises the uncertainties and risks posed to funding by the factors discussed above and follows the process outlined below.

Step 1: The Fund sets a funding target (or funding basis) which defines the target amount of assets to be held to meet the future cashflows. The assumptions underlying the funding target are discussed further in the next section. A calculation is carried out at the valuation date to compare the assets held with the funding target.

Step 2: The Fund sets the time horizon over which the funding target is to be reached

Step 3: The Fund sets contributions that give a sufficiently high likelihood of meeting the funding target over the set time horizon. More detail on this risk based approach to setting contribution rates can be found in **Appendix A**.

As per 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 are 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 compared to 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 rates for employers are determined with the aim of meeting the funding target in respect of these new benefits at the end of the set time horizon with an appropriate likelihood of success. 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.

The methodology for calculating the primary rate will also depend on whether an employer is open or closed to new entrants. A closed employer will have a higher rate as we must allow for the consequent gradual ageing of the workforce.

For the reasons outlined above regarding the uncertainty of the future, there is no guarantee that the primary rate paid 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. Further discussion of this uncertainty is set out in **Appendix A**.

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 on 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.

The liabilities of the Fund are reported on a single set of financial assumptions, based on financial market data as at 31 March 2017. However, when we assess the required employer contributions to meet the funding target, we use a model that calculates the contributions required under 5000 different possible future economic scenarios. Under these economic scenarios, key financial assumptions about benefit increases and investment returns are varied across a wide range of potential future outcomes. More information about these types of assumptions is set out in **Appendix D**.

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 the 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 anticipated 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 modelling, analysis and discussion reported in our paper titled '2017 valuation – Asset Outperformance Assumption (AOA)', dated 14 August 2017, the Fund is satisfied that an AOA of 2.0% p.a. is a prudent assumption for the purposes of this valuation. An AOA of 1.8% was used at the 2014 valuation.

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).

In a similar way 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 our paper titled '2017 valuation – pay growth assumption', dated 15 August 2017. Based on the results of this modelling the Fund set a salary growth assumption equal to RPI (compared to RPI + 1.0% p.a. at the 2014 valuation).

A summary of the financial assumptions underpinning the target funding basis 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*	1.8%	2.0%
Discount rate	**5.3%**	**3.7%**
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*	1.0%	0.0%
Salary increase assumption	**4.5%**	**3.4%**

**Applied arithmetically in 2014 and geometrically in 2017*

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. In this valuation of the Fund, we use a single agreed set of demographic assumptions which is set out below and in more detail in **Appendix C**.

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	22.5 years	21.9 years
Non-pensioners	24.7 years	23.3 years
Female		
Pensioners	24.1 years	24.3 years
Non-pensioners	26.8 years	26.1 years

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

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 C**.

Further comments on the assumptions

We are required to include a degree of prudence within the valuation. That 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 the Fund's investment strategy will outperform the chosen discount rate), the pre and post retirement discount rate would be set at around 6.2% p.a. as confirmed by the Fund's Investment Consultant.

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 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.

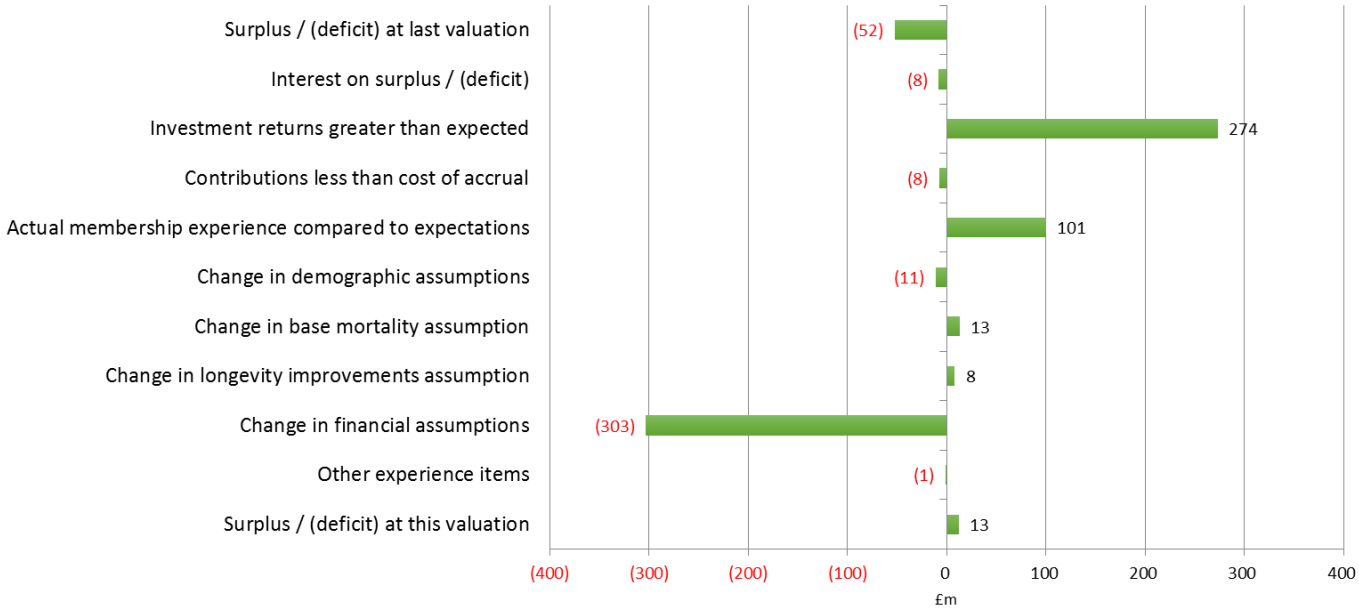
A funding level of 100% would correspond to the Funding Objective being met at the valuation date.

Valuation Date	31 March 2014	31 March 2017
Past Service Liabilities	**(£m)**	**(£m)**
Employees	620	749
Deferred Pensioners	186	275
Pensioners	525	731
Total Liabilities	**1,331**	**1,755**
Assets	**1,279**	**1,768**
Surplus / (Deficit)	**(52)**	**13**
Funding Level	**96%**	**101%**

At the 2017 valuation, there was a surplus of assets relative to the assessed cost of members' benefits on the target funding basis of £13m.

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 cost of £8m. This is broadly three years of compound interest at 5.3% p.a. applied to the previous valuation deficit of £52m (and can be thought of as the investment return that would have been achieved on the extra assets the Fund would have held if fully funded).
- Investment returns being higher than expected since 2014 lead to a gain of £274m. This is roughly the difference between the actual three-year return (37.9%) and expected three-year return (16.8%) applied to the whole fund assets from the previous valuation of £1,279m, with a further allowance made for cashflows during the period.
- The impact of the change in demographic assumptions has been a loss of around £11m.
- The change in mortality assumptions (baseline and improvements) has given rise to a gain of £21m.
- The change in financial conditions since the previous valuation has led to a loss of £303m. This is due to a decrease in the real discount rate between 2014 and 2017.
- Membership experience over the 3 years has led to a gain of £101m. The most material items of membership experience have been:
    - Lower than expected salary increases leading to a gain of £48m
    - Lower than expected pension increases leading to gain of £50m
    - Lower than expected ill health retirements leading to a gain of £8m.

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. The projected funding level over time was detailed as part of the asset liability modelling in November 2017.

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.

In order to meet the above objectives we have used the methodology set out in **Section 2** and **Appendix A** of this report as well as the Fund's Funding Strategy Statement to set employer contributions rates from 1 April 2018. These are set out in the Rates and Adjustments Certificate as set out in **Appendix F.**

The table below summarises the whole fund Primary and Secondary Contribution rates at this valuation. The Primary rate is the payroll weighted average of the underlying individual employer primary rates and the Secondary rate is the total of the underlying individual employer secondary rates, calculated in accordance with the Regulations and CIPFA guidance.

Primary Rate (% of pay)	Secondary Rate (£)		
1 April 2018 - 31 March 2021	2018/19	2019/20	2020/21
17.8%	£3,973,000	£4,108,000	£4,248,000

The Primary rate also includes an allowance of 0.6% of pensionable pay for the Fund's expenses.

The Fund's "Common Contribution rate" as at 31 March 2014 was 20.2% of pay, as shown in the table below. However, it should be noted that the change in regulatory regime and guidance on contribution rates means that any direct comparison between the whole fund rate at 2017 and the 2014 Common Contribution Rate is not appropriate.

Contribution Rates	31 March 2014 (% of pay)
Employer future service rate (incl. expenses)	18.8%
Past Service Adjustment	1.4%
Total employer contribution rate (incl. expenses)	**20.2%**
Employee contribution rate	5.8%
Expenses	0.4%

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:

	Benefit Increases & CARE Revaluation			
Discount Rates	(£m)	2.2%	2.4%	2.6%
	3.9%	132 108%	73 104%	12 101%	Surplus/(Deficit) Funding Level
	3.7%	74 104%	13 101%	(51) 97%	Surplus/(Deficit) Funding Level
	3.5%	13 101%	(51) 97%	(117) 94%	Surplus/(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 fall at a rate of 1.25% each year. The more prudent assumption shown in the table below for sensitivity analysis assumes that mortality rates will fall 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
	(£m)	**(£m)**
(Deficit)	13	(6)
Funding Level	**101%**	**100%**

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.

Sensitivity of contribution rates to changes in assumptions

The employer contribution rates are dependent on a number of factors including the membership profile, current financial conditions, the outlook for future financial conditions, and demographic trends such as longevity. Changes in each of these factors can have a material impact on the contribution rates (both primary and secondary rates). We have not sought to quantify the impact of differences in the assumptions because of the complex interactions between them.

Funding risks

Employers participating in the Fund are 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.
- Resource and Environmental risks – i.e. risks relating to potential resource constraints and environmental changes, and their impact on Fund employers 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 Employers 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 employers 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 employers (e.g. relating to early / ill health retirements or salary increases) in a bid to curtail any adverse impact on the Fund.
- Pooling certain employers together at the valuation and then setting a single (pooled) contribution rate that they will all pay. This can help to stabilise contribution rates (at the expense of cross-subsidy between the employers in the pool during the period between valuations).
- Carrying out a review of the future security of the Fund's employers (i.e. assessing the strength of employer covenants) and ultimately their ability to continue to pay contributions or make good future funding deficits.
- Carry out a bespoke analysis of the longevity of Fund members and monitor how this changes over time, so that the longevity assumptions at the valuation provide as close a fit as possible to the particular experience of 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. An assessment can then be made as to whether long term, secure employers in the Fund can stabilise their future contribution rates (thus introducing more certainty into their future budgets) without jeopardising the long-term health of the Fund.
- Purchasing ill health liability insurance to mitigate the risk of an ill health retirement impacting on solvency and funding level of an individual employer where appropriate.
- Monitoring different employer characteristics in order to build up a picture of the risks posed. Examples include membership movements, cash flow positions and employer events such as cessations.
- 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 different types of employer in different circumstances have their 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; and
- the information the Fund holds about the participating employers.

Further recommendations

Valuation frequency

Under the provisions of the LGPS regulations, 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 (and for individual employers in some cases) 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.

New employers joining the Fund

Any new employers or admission bodies joining the Fund should be referred to the Fund Actuary to assess the required level of contribution. Depending on the number of transferring members the ceding employer's rate may also need to be reviewed.

Additional payments

Employers may make voluntary additional contributions to recover any funding shortfall over a shorter period, subject to agreement with the Administering Authority and after receiving the relevant actuarial advice.

Further sums should be paid to the Fund by employers to meet the capital costs of any unreduced early retirements, reduced early retirements before age 60 and/or augmentation (i.e. additional membership or additional pension) using the methods and factors issued by me from time to time or as otherwise agreed.

In addition, payments may be required to be made to the Fund by employers to meet the capital costs of any ill-health retirements that exceed those allowed for within our assumptions.

Cessations and bulk transfers

Any employer who ceases to participate in the Fund should be referred to us in accordance with Regulation 62 of the Regulations.

Any bulk movement of scheme members:

- involving 10 or more scheme members being transferred from or to another LGPS fund, or
- involving 2 or more scheme members being transferred from or to a non-LGPS pension arrangement;

should be referred to us to consider the impact on the Fund.

7 Reliances and limitations

Third parties

This document has been prepared for the sole use of The Highland 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.

As this report has not been prepared for a third party, no reliance by any third party will be placed on it. It follows that there is no duty or liability by Hymans Robertson LLP (or its members, partners, officers, employees and agents) to any party other than The Highland Council. Hymans Robertson LLP therefore disclaims all liability and responsibility arising from any reliance on or use of this report by any person having access to this report or by anyone who may be informed of the contents of the Report.

Component reports

As set out in **Section 1** and **Section 6**, the totality of our advice relevant 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 6 November 2017.

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 relate to actuarial valuations.

Richard Warden

Fellow of the Institute and Faculty of Actuaries

For and on behalf of Hymans Robertson LLP

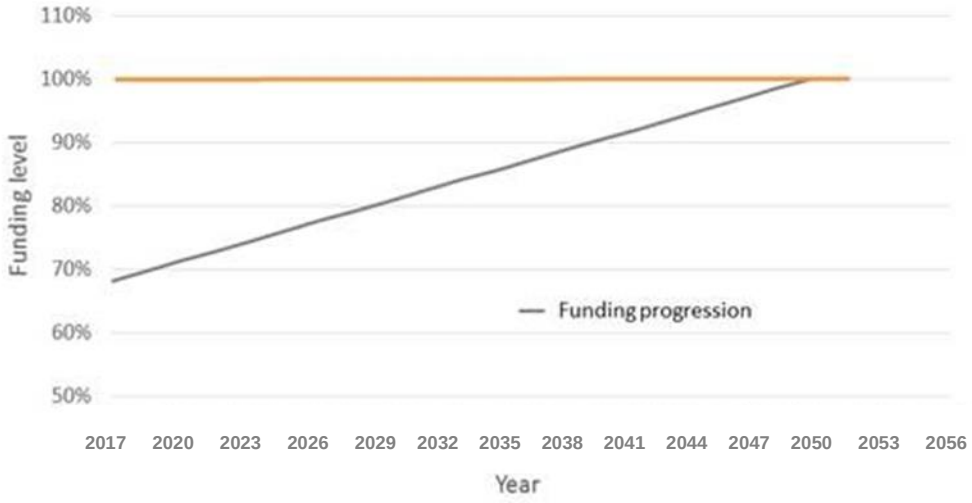
27 March 2018

Robert Bilton

Fellow of the Institute and Faculty of Actuaries

Appendix A: Risk based approach to setting contribution rates

At previous valuations we have set contribution rates by calculating them using a single set of assumptions about the future economic conditions (a 'deterministic' method). By using this deterministic method, there is an implicit assumption that the future will follow expectations (i.e. the financial assumptions used in the calculation) and the employer will return to full funding via one 'journey'. This approach is summarised in the illustrative chart below.



However, pension funding is uncertain as:

- the Fund's assets are invested in volatile financial markets and therefore they go up and down in value; and
- the pension benefits are linked to inflation which again can go up and down in value over time.

One single set of assumptions are very unlikely to actually match what happens, and therefore, the funding plan originally set out will not evolve in line with the single journey shown above. The actual evolution of the funding position could be one of many different 'journeys', and a sample of these are given below.

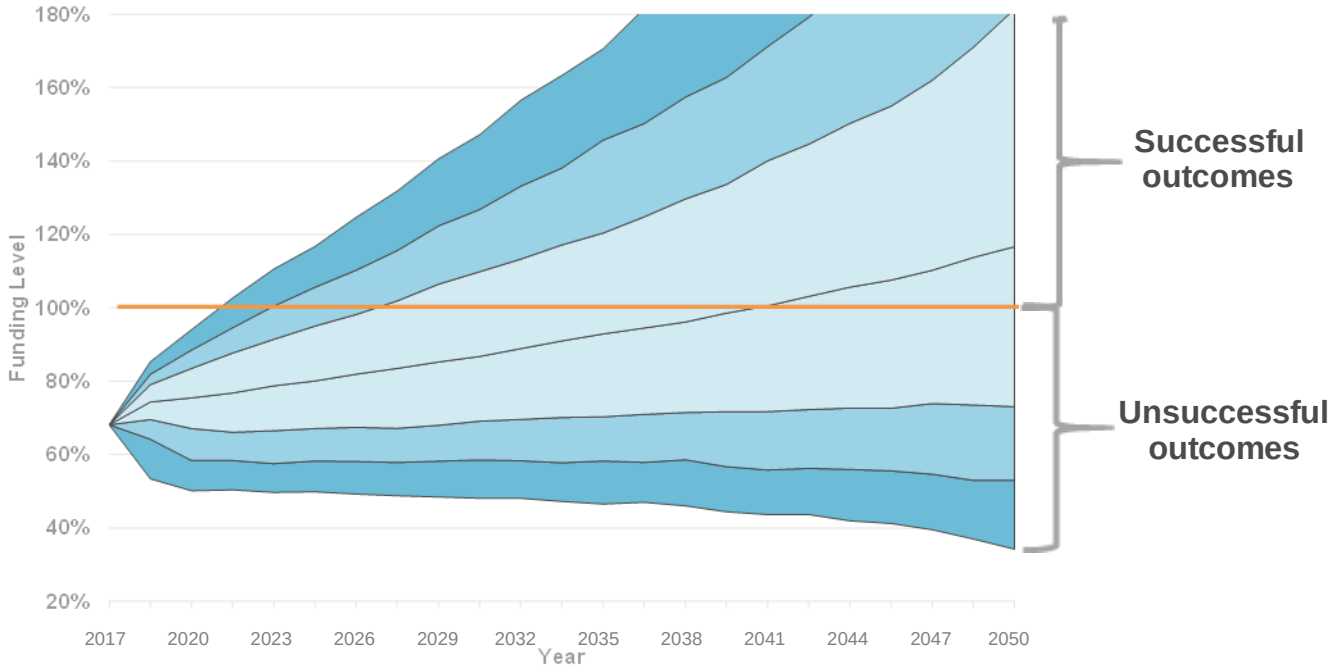
The inherent uncertainty in pension funding creates a risk that a funding plan will not be a success i.e. the funding target will not be reached over the agreed time period.

This risk can never be fully mitigated whilst invested in volatile assets and providing inflation linked benefits, however the main disadvantage of the traditional deterministic method is that it does not allow the Fund, employer, regulators or actuary to assess and understand the risk associated with the proposed funding plan and the likelihood of its success, or otherwise.

Risk Based Approach

At this valuation, we have adopted a 'risk based' approach when setting contribution rates. This approach considers thousands of simulations (or 'journeys') to be projected of how each employer's assets and liabilities may evolve over the future until we have a distribution of funding outcomes (ratio of assets to liabilities). Each simulation represents a different possible journey of how the assets and liabilities could evolve and they will vary due to assumptions about investment returns, inflation and other financial factors. Further technical detail about the methodology underlying these projections is set out in **Appendix D**.

Once we have a sufficient number of outcomes to form a statistically credible distribution (we use 5,000 outcomes), we can examine what level of contribution rate gives an appropriate likelihood of meeting an employer's funding target (usually a 100% funding level) within the agreed timeframe ('time horizon') (i.e. a sufficient number of successful outcomes). The picture below shows a sample distribution of outcomes for an employer.



Having this 'funnel' of outcomes allows the Fund to understand the likelihood of the actual outcome being higher or lower than a certain level. For example, there is 2/3rds chance the funding level will be somewhere within the light shaded area, and there is a 1 in 100 chance that the funding level will be outside the funnel altogether. Using this 'probability distribution', we then set a contribution rate that leads to a certain amount of funding outcomes being successful (e.g. 2/3rds).

Further detail on the likelihoods used in employer's funding plans is set out in the Fund's Funding Strategy Statement.

Appendix B: 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	11,730	199,394	12,264	204,604	7,649

*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	10,084	11,312	12,312	13,424

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	6,381	31,594	7,753	38,116
Dependants	1,186	2,857	1,307	3,318
Children	91	115	91	135
Total pensioner members	**7,658**	**34,566**	**9,151**	**41,569**

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)	-	50.0	10.1	11.8
Employees (Final Salary)	52.1	52.2		
Deferred Pensioners	50.8	50.8	-	-
Pensioners	66.9	67.0	-	-

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) (£m)	Allocation %	31 March 2017 (Market Value) (£m)	Allocation %
UK equities	482	38%	433	25%
UK fixed interest gilts	51	4%	78	4%
UK corporate bonds	159	12%	63	3%
UK index-linked gilts	34	3%	83	5%
Overseas equities	406	32%	785	45%
Overseas bonds	0	0%	71	4%
Property	120	9%	196	11%
Cash and net current assets	24	2%	56	3%
Total	**1,276**	**100%**	**1,765**	**100%**

Note that, for the purposes of determining the funding position at 31 March 2014 and 31 March 2017, the asset value we have used also includes the present value of expected future early retirement strain payments (amounting to £2.875m at 31 March 2017).

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

Consolidated accounts (£000)	Year to			Total
	31 March 2015	30 March 2016	31 March 2017	
Income				
Employer - normal contributions	36,363	38,883	39,922	115,168
Employer - additional contributions	0	3	5	8
Employer - early retirement and augmentation strain contributions	2,615	3,738	4,861	11,214
Employee - normal contributions	12,368	12,545	12,428	37,340
Employee - additional contributions	59	64	81	204
Transfers In Received (including group and individual)	2,189	1,709	2,050	5,948
Other Income	0	0	0	0
Total Income	**53,594**	**56,941**	**59,346**	**169,881**
Expenditure				
Gross Retirement Pensions	35,363	37,358	40,840	113,561
Lump Sum Retirement Benefits	9,644	12,146	14,036	35,826
Death in Service Lump sum	2,374	2,090	2,046	6,510
Death in Deferment Lump Sum	0	0	0	0
Death in Retirement Lump Sum	0	0	0	0
Gross Refund of Contributions	246	245	178	669
Transfers out (including bulk and individual)	1,755	2,850	822	5,427
Fees and Expenses	1,304	1,243	1,315	3,862
Total Expenditure	**50,686**	**55,932**	**59,237**	**165,855**
Net Cashflow	**2,908**	**1,009**	**109**	**4,026**
Assets at start of year	**1,275,733**	**1,448,794**	**1,469,269**	**1,275,733**
Net cashflow	**2,908**	**1,009**	**109**	**4,026**
Change in value	**170,153**	**19,466**	**295,525**	**485,144**
Assets at end of year	**1,448,794**	**1,469,269**	**1,764,903**	**1,764,903**
Approximate rate of return on assets	**13.3%**	**1.3%**	**20.1%**	**37.9%**

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 C: Assumptions

Financial assumptions

Financial assumptions	31 March 2014 (% p.a.)	31 March 2017 (% p.a.)
Discount rate	5.3%	3.7%
Price inflation (CPI)	2.7%	2.4%
Pay increases*	4.5%	3.4%
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	0.4%	0.6%

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

Mortality 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. 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. for men and women.

Longevity assumptions	31 March 2017
Longevity - baseline	Vita
Longevity - improvements	
CMI Model version used	CMI_2016
Starting rates	CMI calibration based on data from Club Vita using the latest available data as at January 2017.
Long term rate of improvement	Period effects: 1.25% p.a. for men and women. Cohort effects: 0% p.a. for men and for women.
Period of convergence	Period effects: CMI model core values i.e. 10 years for ages 50 and below and 5 years for those aged 95 and above, with linear transition to 20 years for those aged between 60 and 80. Cohort effects: CMI core i.e. 40 years for those born in 1950 or later declining linearly to 5 years for those born in 1915 or earlier.
Proportion of convergence remaining at mid point	50%

Other demographic valuation assumptions

Retirements in normal health	We have adopted the retirement age pattern assumption as specified by the 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	1.0% of members (uniformly distributed across the age, service and salary range) 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	0.14	0.02	0.13	0.02
30	131	0.32	45.25	104.64	0.25	0.03	0.23	0.03
35	144	0.38	35.35	81.74	0.49	0.16	0.46	0.15
40	150	0.64	28.44	65.77	0.74	0.26	0.69	0.24
45	157	1.07	23.28	53.82	1.17	0.52	1.09	0.49
50	162	1.72	18.03	41.69	2.20	1.23	2.59	1.45
55	162	2.68	17.32	40.05	6.91	4.60	4.67	3.11
60	162	4.83	15.43	35.67	11.75	8.04	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	0.16	0.14	0.15	0.13
30	131	0.21	43.12	73.18	0.22	0.19	0.21	0.18
35	144	0.34	37.19	63.11	0.43	0.36	0.40	0.33
40	150	0.55	30.93	52.49	0.64	0.53	0.60	0.50
45	157	0.89	25.46	43.21	0.85	0.71	0.79	0.66
50	162	1.30	19.40	32.93	1.57	1.28	1.84	1.51
55	162	1.71	18.15	30.80	5.72	4.64	3.87	3.14
60	162	2.19	14.59	24.76	12.04	9.72	3.97	3.20
65	162	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix D: Technical appendix for contribution rate modelling

In order to assess the likelihood of the employer's section of the Fund achieving full funding we have carried out stochastic asset liability modelling (ALM) that takes into account the main characteristics and features of each employer's share of the Fund's assets and liabilities. For The Highland Council, a full ALM exercise, known as comPASS was carried out at whole Fund level to inform appropriate setting of contribution rates. For employers a simplified ALM, known as TARGET has been used. Please refer to the Funding Strategy Statement to determine which method has been applied for each employer.

The following sections provide more detail on the background to the modelling.

Cash flows

In projecting forward the evolution of each employer's (or group of employers') section of the Fund, we have used anticipated future benefit cashflows. These cashflows have been generated using the membership data provided for the formal valuation as at 31 March 2017, the demographic and financial assumptions used for the valuation and make an allowance for future new joiners to the Fund (if any employer or group of employers is/are open to new entrants).

For comPASS we have estimated future service benefit cash flows and projected salary roll for new entrants (where appropriate) after the valuation date such that payroll remains constant in real terms (i.e. full replacement) unless otherwise stated. There is a distribution of new entrants introduced at ages between 25 and 65, and the average age of the new entrants is assumed to be 40 years. All new entrants are assumed to join and then leave service at their state pension age, which is a much simplified set of assumptions compared with the modelling of existing members. The base mortality table used for the new entrants is an average of mortality across the LGPS and is not specific to the Fund, which is another simplification compared to the modelling of existing members. TARGET uses a similar but simplified approach to generating new entrants. Nonetheless, we believe that these assumptions are reasonable for the purposes of the modelling given the highly significant uncertainty associated with the level of new entrants.

We do not allow for any variation in actual experience away from the demographic assumptions underlying the cashflows. Variations in demographic assumptions (and experience relative to those assumptions) can result in significant changes to the funding level and contribution rates. We allow for variations in inflation expectations (RPI or CPI as appropriate), interest rates, yield curves and asset class returns. Cashflows into and out of the Fund are projected forward in annual increments and are assumed to occur in the middle of each financial year (April to March). Investment strategies are assumed to be rebalanced annually.

Asset liability model (comPASS)

These cashflows, and the employer's assets, are projected forward using stochastic projections of asset returns and economic factors such as inflation and bond yields. These projections are provided by the Economic Scenario Service (ESS), our (proprietary) stochastic asset model, which is discussed in more detail below.

In the modelling we have assumed that the Fund will undergo valuations every three years and a contribution rate will be set that will come into force one year after the simulated valuation date. For 'stabilised' contributions, the rate at which the contribution changes is capped and floored. There is no guarantee that such capping or flooring will be appropriate in future; this assumption has been made so as to illustrate the likely impact of practical steps that may be taken to limit changes in contribution rates over time.

Unless stated otherwise, we have assumed that all contributions are made and not varied throughout the period of projection irrespective of the funding position. In practice the contributions are likely to vary especially if the funding level changes significantly.

Investment strategy is also likely to change with significant changes in funding level, but we have not considered the impact of this.

In allowing for the simulated economic scenarios, we have used suitable approximations for updating the projected cashflows. The nature of the approximations is such that the major financial and investment risks can be broadly quantified. However, a more detailed analysis would be required to understand fully the implications and appropriate implementation of a very low risk or 'cash flow matched' strategy.

We would emphasise that the returns that could be achieved by investing in any of the asset classes will depend on the exact timing of any investment/disinvestment. In addition, there will be costs associated with buying or selling these assets. The model implicitly assumes that all returns are net of costs and that investment/disinvestment and rebalancing are achieved without market impact and without any attempt to 'time' entry or exit.

Asset liability model (TARGET)

TARGET uses a similar, but simplified, modelling approach to that used for comPASS.

Contribution rates are inputs to the model and are assumed not to vary throughout the period of projection, with no valuation every three years or setting of 'stabilised' contribution rates.

In allowing for the simulated economic scenarios, we have used more approximate methods for updating the projected cash flows. The nature of the approximations is such that the major financial and investment risks can be broadly quantified.

When projecting forward the assets, we have modelled a proxy for the Fund's investment strategy by simplifying their current benchmark into growth (UK equity) and non-growth (index-linked gilts) allocations, and then adjusting the volatility of the resultant portfolio results to approximately reflect the diversification benefit of the Fund's investment strategy.

Economic Scenario Service

The distributions of outcomes depend significantly on the Economic Scenario Service (ESS), our (proprietary) stochastic asset model. This type of model is known as an economic scenario generator and uses probability distributions to project a range of possible outcomes for the future behaviour of asset returns and economic variables. Some of the parameters of the model are dependent on the current state of financial markets and are updated each month (for example, the current level of equity market volatility) while other more subjective parameters do not change with different calibrations of the model.

Key subjective assumptions are the average excess equity return over the risk free asset (tending to approximately 3% p.a. as the investment horizon is increased), the volatility of equity returns (approximately 18% p.a. over the long term) and the level and volatility of yields, credit spreads, inflation and expected (breakeven) inflation, which affect the projected value placed on the liabilities and bond returns. The market for CPI linked instruments is not well developed and our model for expected CPI in particular may be subject to additional model uncertainty as a consequence. The output of the model is also affected by other more subtle effects, such as the correlations between economic and financial variables.

Our expectation (i.e. the average outcome) is that long term real interest rates will gradually rise from their current low levels. Higher long-term yields in the future will mean a lower value placed on liabilities and therefore our median projection will show, all other things being equal, an improvement in the current funding position (because of the mismatch between assets and liabilities). The mean reversion in yields also affects expected bond returns.

While the model allows for the possibility of scenarios that would be extreme by historical standards, including very significant downturns in equity markets, large systemic and structural dislocations are not captured by the model. Such events are unknowable in effect, magnitude and nature, meaning that the most extreme possibilities are not necessarily captured within the distributions of results.

Expected Rate of Returns and Volatilities

The following figures have been calculated using 5,000 simulations of the Economic Scenario Service, calibrated using market data as at 31 March 2017. All returns are shown net of fees. Percentiles refer to percentiles of the 5,000 simulations and are the annualised total returns over 5, 10 and 20 years, except for the yields which refer to the (simulated) yields in force at that time horizon. Only a subset of the asset classes are shown below.

		Annualised total returns									
		Cash	Index Linked Gilts (medium dated)	Fixed Interest Gilts (medium dated)	Corporate Bonds (medium dated)	UK Equity	Overseas Equity	Property	Inflation	17 year real yield	17 year yield
5 years	16th %'ile	-0.7%	-2.5%	-3.1%	-2.9%	-4.5%	-6.4%	-4.3%	1.5%	-2.3%	1.1%
	50th %'ile	0.4%	0.3%	0.1%	0.5%	3.6%	3.4%	1.4%	2.9%	-1.4%	2.4%
	84th %'ile	1.7%	3.0%	3.2%	3.9%	12.4%	13.7%	8.0%	4.4%	-0.5%	4.0%
10 years	16th %'ile	-0.2%	-1.6%	-1.1%	-0.7%	-1.4%	-2.7%	-2.2%	1.7%	-1.9%	1.4%
	50th %'ile	1.3%	0.1%	0.4%	1.0%	4.6%	4.3%	2.4%	3.0%	-0.7%	3.0%
	84th %'ile	3.1%	2.0%	2.0%	2.7%	10.9%	11.8%	7.3%	4.6%	0.5%	5.1%
20 years	16th %'ile	0.7%	-0.9%	0.4%	0.9%	1.3%	0.1%	0.0%	1.9%	-0.8%	2.1%
	50th %'ile	2.5%	0.5%	1.3%	2.1%	5.9%	5.5%	3.7%	3.1%	0.8%	4.0%
	84th %'ile	4.6%	2.1%	2.3%	3.3%	10.6%	11.2%	7.6%	4.6%	2.3%	6.3%
	Volatility (Disp) (1 yr)	0.5%	7%	10%	10%	16%	18%	14%	1.4%		

The current calibration of the model indicates that a period of outward yield movement is expected. For example, over the next 20 years our model expects the 17 year maturity annualised real (nominal) interest rate to rise from -1.7% (1.7%) to 0.8% (4.0%).

Appendix E: 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 more than expected. As a result of this, the funding level is expected to improve slightly.

Overall, as we have taken a long term view, employer contribution expectations will remain broadly unchanged.

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 F: 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 March 2018 and our report on the actuarial valuation dated 27 March 2018.

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 C of the 31 March 2017 formal valuation report dated 27 March 2018. 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.

Employer code	Employer/Pool name	Primary Rate (%) 1 April 2018 - 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
	The Highland Council Pool							
40	The Highland Council	17.5%	2.0%	2.0%	2.0%	19.5%	19.5%	19.5%
2	Comhairle Nan Eilean Siar	17.5%	2.0%	2.0%	2.0%	19.5%	19.5%	19.5%
11	Stornoway Port Authority	17.5%	2.0%	2.0%	2.0%	19.5%	19.5%	19.5%
13	Cromarty Firth Port Authority	17.5%	2.0%	2.0%	2.0%	19.5%	19.5%	19.5%
18	Highland and Western Isles Valuation Joint Board (Assessors)	17.5%	2.0%	2.0%	2.0%	19.5%	19.5%	19.5%
59	Bord Na Gaidhlig	17.5%	2.0%	2.0%	2.0%	19.5%	19.5%	19.5%
60	Sight Action (formerly VISH)	17.5%	2.0%	2.0%	2.0%	19.5%	19.5%	19.5%
61	Highland Blindcraft	17.5%	2.0%	2.0%	2.0%	19.5%	19.5%	19.5%
72	An Comunn Gaidhealach	17.5%	2.0%	2.0%	2.0%	19.5%	19.5%	19.5%
73	Highlife Highland	17.5%	2.0%	2.0%	2.0%	19.5%	19.5%	19.5%
76	NHS Highland	17.5%	2.0%	2.0%	2.0%	19.5%	19.5%	19.5%
	Scottish Police Authority							
78	Scottish Police Authority (former Northern Joint Police Board staff)	17.3%	0.1%	0.1%	0.1%	17.4%	17.4%	17.4%
67	SPSA (Scottish Police Service Authority)	17.3%	0.1%	0.1%	0.1%	17.4%	17.4%	17.4%
	Scottish Fire & Rescue Service							
79	Scottish Fire & Rescue Service (former Highlands & Islands Fire Board Staff)	17.1%	2.4%	2.4%	2.4%	19.5%	19.5%	19.5%
	Highlands of Scotland Tourist Board (HOST)							
42	Highlands of Scotland Tourist Board (HOST)	33.3%	£118,000	£122,000	£126,000	33.3% plus £118,000	33.3% plus £122,000	33.3% plus £126,000
	HIE/LEC							
68	HIE/LEC	30.1%	£143,000	£148,000	£153,000	30.1% plus £143,000	30.1% plus £148,000	30.1% plus £153,000
	SDS							
69	SDS	33.7%	£234,000	£242,000	£250,000	33.7% plus £234,000	33.7% plus £242,000	33.7% plus £250,000
	Individual Employers							
14	Inverness Harbour Trust	29.5%	£12,000	£12,000	£13,000	29.5% plus £12,000	29.5% plus £12,000	29.5% plus £13,000
27	Governors of Eden Court Theatre	30.1%	£32,000	£33,000	£34,000	30.1% plus £32,000	30.1% plus £33,000	30.1% plus £34,000
34	Inverness College	17.9%	-0.8%	-0.8%	-0.8%	17.1%	17.1%	17.1%
35	The North Highland College	16.9%	1.0%	1.0%	1.0%	17.9%	17.9%	17.9%
36	Lews Castle College	17.7%	-	-	-	17.7%	17.7%	17.7%
41	UHI	18.5%	£93,000	£96,000	£100,000	18.5% plus £93,000	18.5% plus £96,000	18.5% plus £100,000
47	Western Isles Tourist Board	20.4%	£9,000	£9,000	£9,000	20.4% plus £9,000	20.4% plus £9,000	20.4% plus £9,000
63	High Trans Initative (HITRANS)	16.6%	2.1%	2.1%	2.1%	18.7%	18.7%	18.7%
64	Hebridean Housing Partnership	18.0%	-	-	-	18.0%	18.0%	18.0%
66	Morrisons FM	29.7%	10.8%	10.8%	10.8%	40.5%	40.5%	40.5%
75	Forth & Oban (FES Ltd)	25.3%	-	-	-	25.3%	25.3%	25.3%
80	WIPRO	34.1%	-	-	-	34.1%	34.1%	34.1%

Signature:		
Date:	27 March 2018	27 March 2018
Name:	Richard Warden	Robert Bilton
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

Notes:

1. Contributions should be paid into The Highland Council 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 us from time to time, or GAD guidance if we consider it to be appropriate.
3. In addition, further sums may be required to be paid to the Fund by employers to meet the capital costs of any ill-health retirements that exceed those within our assumptions.
4. The certified contribution rates represent the minimum level of contributions to be paid. Employing authorities may pay further amounts at any time, and future periodic contributions may be adjusted on a basis approved by us.