ITEM 12

NORTH YORKSHIRE COUNTY COUNCIL

PENSION BOARD

16 JANUARY 2020

2019 TRIENNIAL VALUATION

Report of the Treasurer

1. PURPOSE OF REPORT

1.1. To update Board members on the progress made to date on the 2019 Triennial Valuation.

2. BACKGROUND AND RECENT EVENTS

- 2.1. The Fund is currently in the process of undertaking the 2019 Triennial Valuation in which employer contribution rates are set for the next three years from 1st April 2020.
- 2.2. The Funding Strategy Statement (FSS) and assumptions of the 2019 Triennial Valuation were approved at the September PFC meeting. The FSS is attached as **Appendix 1**.
- 2.3. In the November Committee, PFC Members were provided with an update on the progress made on the 2019 Triennial Valuation to date. This report is attached as **Appendix 2**.
- 2.4. A verbal update on progress to date will be provided to Board members at the January meeting.

3. RECOMMENDATIONS

3.1. Board members to note the progress made on the 2019 Triennial Valuation.

NORTH YORKSHIRE PENSION FUND (NYPF) 2019 Funding Strategy Statement (FSS)

This Statement has been prepared by North Yorkshire County Council (the Administering Authority) to set out the funding strategy for the North Yorkshire Pension Fund (the NYPF), in accordance with Regulation 58 of the Local Government Pension Scheme Regulations 2013 (as amended) and the 2016 guidance issued by the Chartered Institute of Public Finance and Accountancy (CIPFA) Pensions Panel.

1. INTRODUCTION

The Local Government Pension Scheme Regulations 2013 (as amended) ("the Regulations") provide the statutory framework from which the Administering Authority is required to prepare a FSS. The key requirements for preparing the FSS can be summarised as follows:

- After consultation with all relevant interested parties involved with the Fund, the Administering Authority will prepare and publish their funding strategy.
- In preparing the FSS, the Administering Authority must have regard to:-
 - the guidance issued by CIPFA for this purpose; and
 - the Investment Strategy Statement (ISS) or the NYPF published under Regulation 7 of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 (as amended);
- The FSS must be revised and published whenever there is a material change in either the policy on the matters set out in the FSS or the ISS.

Benefits payable under the NYPF are guaranteed by statute and thereby the pensions promise is secure. The FSS addresses the issue of managing the need to fund those benefits over the long term, whilst at the same time, facilitating scrutiny and accountability through improved transparency and disclosure.

The Scheme is a defined benefit arrangement with principally final salary related benefits for contributing members up to 1 April 2014 and Career Averaged Revalued Earnings ("CARE") benefits earned thereafter. There is also a "50:50 Scheme Option", where members can elect to accrue 50% of the full scheme benefits and pay 50% of the normal member contribution rate.

The benefits provided by the NYPF are specified in the governing legislation (the Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014) and the Regulations referred to above. The required levels of employee contributions are also specified in the Regulations.

Employer contributions are determined in accordance with the Regulations which require that an actuarial valuation is completed every three years by the actuary, including a rates and adjustments certificate. Contributions to the NYPF should be set so as to "secure its solvency" and to "ensure long-term cost efficiency", whilst the actuary must also have regard to the desirability of maintaining as nearly constant a primary rate of contribution as possible. The actuary must have regard to the FSS in carrying out the valuation.

2. PURPOSE OF THE FSS IN POLICY TERMS

Funding is the making of advance provision to meet the cost of accruing benefit promises. Decisions taken regarding the approach to funding will therefore determine the rate or pace at which this advance provision is made. Although the Regulations specify the fundamental principles on which funding contributions should be assessed, implementation of the funding strategy is the responsibility of the Administering Authority, acting on the professional advice provided by the actuary.

The purpose of this Funding Strategy Statement is:

- to establish a clear and transparent fund-specific strategy which will identify how employers' pension liabilities are best met going forward;
- to support the desirability of maintaining as nearly constant a primary contribution rate as possible;
- to ensure the regulatory requirements to set contributions so as to ensure the solvency and long-term cost-efficiency of the fund are met; and
- to take a prudent longer-term view of funding those liabilities.

The intention is for this strategy to be both cohesive and comprehensive for the NYPF as a whole, recognising that there will be conflicting objectives which need to be balanced and reconciled. Whilst the position of individual employers must be reflected in the statement, it must remain a single strategy for the Administering Authority to implement and maintain.

3. AIMS AND PURPOSE OF THE NYPF

The aims of the Fund are to:

- enable primary contribution rates to be kept as nearly constant as possible and (subject to the Administering Authority not taking undue risks) at reasonable cost to the taxpayers, scheduled, resolution and admitted bodies, whilst achieving and maintaining fund solvency and long-term cost efficiency, which should be assessed in light of the risk profile of the fund and employers, and the risk appetite of the Administering Authority and employers alike
- manage employers' liabilities effectively
- ensure that sufficient resources are available to meet all liabilities as they fall due, and
- seek returns on investments within reasonable risk parameters.

The purpose of the Fund is to:

- receive monies in respect of contributions, transfer values and investment income,
- and pay out monies in respect of scheme benefits, transfer values, costs, charges and expenses as defined in the Regulations and in the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016.

4. RESPONSIBILITIES OF THE KEY PARTIES

The Administering Authority should:

- operate a pension fund
- collect employer and employee contributions, investment income and other amounts due to the pension fund as stipulated in LGPS Regulations
- pay from the pension fund the relevant entitlements as stipulated in LGPS Regulations
- invest surplus monies in accordance with the Regulations
- ensure that cash is available to meet liabilities as and when they fall due
- manage the valuation process in consultation with the NYPF's actuary
- prepare and maintain an FSS and an ISS, both after proper consultation with interested parties, monitor all aspects of the NYPF's performance and funding and amend the FSS/ISS accordingly
- effectively manage any potential conflicts of interest arising from its dual role as both fund administrator and scheme employer
- enable the local pension board to review the valuation process as set out in their terms of reference.

The Individual Employer should:

- deduct contributions from employees' pay correctly after determining the appropriate employee contribution rate (in accordance with the Regulations)
- pay all contributions, including their own as determined by the actuary, promptly by the due date
- develop a policy on certain discretions and exercise those discretions as permitted within the regulatory framework
- make additional contributions in accordance with agreed arrangements in respect of, for example, augmentation of scheme benefits and early retirement strain notify the Administering Authority promptly of all changes to membership or, as may be proposed, which affect future funding
- pay any exit payments on ceasing participation in the NYPF

The Fund actuary should:

- prepare valuations including the setting of employers' contribution rates at a level to ensure fund solvency and long-term cost efficiency after agreeing assumptions with the Administering Authority and having regard to the FSS and the LGPS Regulations
- prepare advice and calculations in connection with bulk transfers and the funding aspects of individual benefit-related matters such as pension strain costs, ill health retirement costs, compensatory added years costs etc,
- provide advice and valuations on the exiting of employers from the NYPF
- provide advice to the Administering Authority on bonds or other forms of security against the financial effect on the fund of employer default
- assist the Administering Authority in assessing whether employer contributions need to be revised between valuations as permitted or required by the Regulations
- ensure that the Administering Authority is aware of any professional guidance or other professional requirements that may be of relevance to his or her role in advising the NYPF
- advise on funding strategy, the preparation of the FSS, and the inter-relationship between the FSS and the ISS.

5. SOLVENCY ISSUES AND TARGET FUNDING LEVELS

Funding Objective

To meet the requirements of the Regulations the Administering Authority's long term funding objective is for the Fund to achieve and then maintain sufficient assets to cover 100% of projected accrued liabilities (the "**funding target**") assessed on an ongoing past service basis including allowance for projected final pay in relation to pre-2014 benefits or where the underpin applies. In the long term, the employer rate would ultimately revert to the Primary Contribution Rate (also known as the Future Service Rate).

Determination of the Funding Target and Recovery Period

The principal method and assumptions to be used in the calculation of the funding target as at 31 March 2019 are set out in Appendix 1.

Underlying these assumptions are the following two principles:

- that the Scheme is expected to continue for the foreseeable future; and
- favourable investment performance can play a valuable role in achieving adequate funding over the longer term.

This allows us to take a longer term view when assessing the contribution requirements for certain employers. As part of this valuation when looking to avoid material, and potentially unaffordable, increases in employer contribution requirements we will consider whether we can build into the funding plan the following:-

- stepping in of contribution rate changes for employers where the orphan funding target is adopted or where the intermediate funding target is being introduced (as defined later in this statement). For the 2019 valuation, the Administering Authority's default approach is to step any contribution increases over a period of 3 years, although in certain circumstances a longer period may be considered, after consultation with the Actuary.
- a longer deficit recovery period than the average future working lifetime, particularly where there are a number of younger active members.

In considering this the Administering Authority, based on the advice of the Actuary, will consider if this results in a reasonable likelihood that the funding plan will be successful.

As part of each valuation separate employer contribution rates are assessed by the actuary for each participating employer or group of employers. These rates are assessed taking into account the experience and circumstances of each employer, following a principle of no cross-subsidy between the distinct employers in the Scheme, other than where grouping of employers has been agreed in line with the policy set out in the Fund's Admissions and Terminations Funding Policy.

In attributing the overall investment performance obtained on the assets of the Scheme to each employer a pro-rata principle is adopted. This approach is effectively one of applying a notional individual employer investment strategy identical to that adopted for the Scheme as a whole (except where an employer adopts a bespoke investment strategy – see below).

The Administering Authority, following consultation with the participating employers, has adopted the following objectives for setting the individual employer contribution rates arising from the 2019 actuarial valuation:

- A default recovery period of 15 years will apply for employers that are assessed to have a deficit.
- In addition, at the discretion of the Administering authority, a maximum deficit recovery period of 21 years will apply. Employers will have the freedom to adopt a recovery plan on the basis of a shorter period if they so wish. A shorter period may be applied in respect of particular employers where the Administering Authority considers this to be warranted (see Deficit Recovery Plan below).
- As a general rule, the Fund does not believe it appropriate for contribution reductions to apply compared to the 2016 funding plan for those employers where substantial deficits remain.
- For any open employers assessed to be in surplus, their individual contribution requirements will be adjusted at the 2019 valuation as follows:
 - Where the funding level is 100-110% employers will pay the future service rate only.
 - Where the funding level is over 110% the default approach for Scheduled Bodies and Admission Bodies with no subsumption commitment from a Scheduled Body in the Fund (as defined in Appendix 1) will be to remove any surplus in excess of 10% over a maximum period of 21 years.

- Where the funding level is over 110% the default approach for Admission Bodies with a subsumption commitment from a Scheduled Body in the Fund will be to remove any surplus in excess of 10% over the recovery period adopted by that Scheduled Body at the 2019 valuation.
- If surpluses are sufficiently large, contribution requirements will be set to a minimum nil total amount.
- The current level of contributions will be stepped down as appropriate, consistent with the approach of stepping contribution increases where appropriate.

For the avoidance of doubt, for practical purposes where employers are in surplus and contributions are to be set below the cost of future accrual this will be implemented via a reduction in the percentage of pensionable pay rate rather than via a negative monetary amount.

For any closed employers assessed to be in surplus, the above approach will generally be followed but the Administering Authority will consider the specific circumstances of the employer in setting an appropriate period to remove the surplus.

The employer contributions will be expressed and certified as two separate elements:

- a percentage of pensionable payroll in respect of the future accrual of benefit (less allowance for surplus as appropriate)
- a schedule of lump sum amounts over 2020/23 in respect of the past service deficit subject to the review from April 2023 based on the results of the 2022 actuarial valuation.

On the cessation of an employer's participation in the Fund, the actuary will be asked to make a termination assessment. Any deficit in the Fund in respect of the employer will be due to the Fund as a termination contribution, unless it is agreed by the Administering Authority and the other parties involved that the assets and liabilities relating to the employer will transfer within the Fund to another participating employer.

However, the Administering Authority has ultimate discretion where the particular circumstances of any given Employer warrant a variation from these objectives.

In determining the above objectives the Administering Authority has had regard to:

- the responses made to the consultation with employers on the FSS principles
- relevant guidance issued by the CIPFA Pensions Panel
- the need to balance a desire to attain the target as soon as possible against the short-term cash requirements which a shorter period would impose, and
- the Administering Authority's views on the strength of the participating employers' covenants in achieving the objective.

Deficit Recovery Plan

If the assets of the scheme relating to an employer are less than the funding target at the effective date of any actuarial valuation, a recovery plan will be put in place, which requires additional contributions from the employer to meet the shortfall.

Additional contributions will be expressed as annual monetary lump sums, subject to review based on the results of each actuarial valuation.

In determining the actual recovery period, and other aspects of the funding strategy, to apply for any particular employer or employer grouping, the Administering Authority may take into account some or all of the following factors:

- the size of the funding shortfall;
- the business plans of the employer;
- the assessment of the financial covenant of the Employer; and the security of future income streams
- any contingent security available to the Fund or offered by the Employer such as guarantor or bond arrangements, charge over assets, etc.
- length of expected period of participation in the Fund.

It is acknowledged by the Administering Authority that, whilst posing a relatively low risk to the Fund as a whole, it is possible that some smaller employers may be faced with contributions that could seriously affect their ability to function in the future. The Administering Authority therefore, after specific agreement has been obtained by Fund Officers from the North Yorkshire Pension Fund Committee, would be willing to use its discretion to negotiate an **evidence based** affordable level of contributions for the organisation for the three years 2020/2023. Any application of this option is at the ultimate discretion of the Administering Authority and will only be considered after the provision of the appropriate evidence and on the basis that it is not inconsistent with the requirements to set employer contributions so as to ensure the solvency and long-term cost efficiency of the NYPF.

The Primary Contribution Rate (Future Service Contribution Rate)

In addition to any contributions required to rectify a shortfall of assets below the funding target, contributions will be required to meet the cost of future accrual of benefits for members after the valuation date (the "primary rate"). The method and assumptions for assessing these contributions are set out in Appendix 1.

6. LINK TO INVESTMENT POLICY SET OUT IN THE INVESTMENT STRATEGY STATEMENT

In assessing the value of the NYPF's liabilities in the valuation, allowance is made for a long-term investment return assumption as set out below, taking into account the investment strategy adopted by the NYPF, as set out in the ISS.

It is not possible to construct a portfolio of investments which produces a stream of income exactly matching the expected liability outgo. However, it is possible to construct a portfolio which closely matches expected future benefit payments and represents the least risk investment position. Such a portfolio would consist of a mixture of long-term index-linked and fixed interest gilts. Investment of the NYPF's assets in line with the least risk portfolio would minimise fluctuations in the NYPF's ongoing funding level between successive actuarial valuations.

Departure from a least risk investment strategy, in particular to include equity type investments, gives the prospect that out-performance by the assets will, over time, reduce the contribution requirements. The funding target might in practice therefore be achieved by a range of combinations of funding plan, investment strategy and investment performance.

Asset Class (Summary)	%
Equities	40-65
Bonds	15-30
Alternatives	20-30
TOTAL	100

The current benchmark investment strategy, as set out in the ISS, is:

The funding strategy adopted for the 2019 valuation is based on an assumed long-term investment return assumption of 4.2% per annum. This is below the Administering Authority's view of the best estimate long-term return assumption of 6.2% as at the valuation date.

Bespoke Investment Strategy

The Investment Strategy adopted by NYPF is determined for the Fund as a whole. This Strategy takes into account the characteristics of NYPF as a whole, and therefore those of the constituent employers as an aggregated entity - it does not seek to distinguish between the individual liability profiles of different employers. The Strategy adopted to date, as reflected in the current ISS, is to invest a significant proportion of the assets in equities. Such investments offer a higher expected return, but also carry a higher level of risk.

NYPF is prepared to offer any employer the opportunity to adopt a Bespoke Investment Strategy (eg 100% bonds). However, to the extent that any Bespoke Investment Strategy will necessitate different investment return assumptions to those used by the Actuary for NYPF overall, there may be a consequential impact on the contribution rate calculated for that employer.

In addition, if an employer opts for a Bespoke Investment Strategy, NYPF reserves the right to determine the most appropriate way of arranging for the investment of the relevant share of the assets according to that Bespoke Strategy.

7. IDENTIFICATION OF RISKS AND COUNTER MEASURES

The funding of defined benefits is by its nature uncertain. Funding of the NYPF is based on both financial and demographic assumptions. These assumptions are specified in the Appendices and the actuarial valuation report. When actual experience is not in line with the assumptions adopted a surplus or shortfall will emerge at the next actuarial assessment and will require a subsequent contribution adjustment to bring the funding back into line with the target. The Administering Authority has been advised by the actuary that the greatest risk to the NYPF's funding is the investment risk inherent in the predominantly equity (or return seeking) based strategy, so that actual asset performance between successive valuations could diverge significantly from the overall performance assumed in the long term.

The Administering Authority keeps, and regularly reviews, a risk register to identify and monitor the risks to the Fund and will, wherever possible, take appropriate action to limit the impact of these both before and after they emerge.

What are the Risks?

Whilst the activity of managing the Fund exposes the Administering Authority to a wide range of risks, those most likely to impact on the funding strategy are investment risk, liability risk, liquidity/maturity risk, regulatory/compliance risk, employer risk and governance risk.

Investment risk

The risk of investments not performing (income) or increasing in value (growth) as forecast. Examples of specific risks would be:

- assets not delivering the required return (for whatever reason, including manager underperformance)
- systemic risk with the possibility of interlinked and simultaneous financial market volatility
- insufficient funds to meet liabilities as they fall due
- inadequate, inappropriate or incomplete investment and actuarial advice is taken and acted upon
- counterparty failure

The specific risks associated with assets and asset classes are:

- equities industry, country, size and stock risks
- fixed income yield curve, credit risks, duration risks and market risks
- alternative assets liquidity risks, property risk, alpha risk
- money market credit risk and liquidity risk
- currency risk
- macroeconomic risks

The Fund mitigates these risks through diversification, permitting investment in a wide variety of markets and assets, and through the use of specialist managers with differing mandates.

The majority of the Fund's investments are in pooled investment vehicles and the Fund is therefore directly exposed to credit risk in relation to the instruments it holds in the pooled investment vehicles. Direct credit risk arising from pooled investment vehicles is mitigated by the underlying assets of the pooled arrangements being ring-fenced from the pooled manager, the regulatory environments in which the pooled managers operate and diversification of investments amongst a number of pooled arrangements. The Committee carries out due diligence checks on the appointment of new pooled investment managers and on an ongoing basis monitors any changes to the operating environment of the pooled manager.

In addition, the Fund holds assets in the LGPS pooling arrangement with Border to Coast Pension Partnership ('BCPP') and will transition further assets to BCPP in the future. Through this arrangement the Fund is exposed to the risk of failing to transition effectively to new pooling arrangements resulting in poorer value for money; lower investment returns; and inability to effectively execute investment strategy."

Employer risk

Those risks that arise from the ever-changing mix of employers, from short-term and ceasing employers, and the potential for a shortfall in payments and/or orphaned liabilities.

The Administering Authority maintains a knowledge base on its employers, their basis of participation and their legal status (e.g. charities, companies limited by guarantee, group/subsidiary arrangements) and uses this information to inform the FSS.

The Administering Authority monitors the active membership of closed employers and considers what action to take when the number of active members falls below 10, such as commissioning a valuation under Regulation 64(4).

The Administering Authority have also commissioned the Fund Actuary to carry out a high level risk analysis of employers in the Fund to assist the Administering Authority in setting the funding strategy for employers at the 2019 valuation of the Fund.

Liquidity/Maturity risk

This is the risk of a reduction in cash flows into the Fund, or an increase in cash flows out of the Fund, or both, which can be linked to changes in the membership and, in particular, a shift in the balance from contributing members to members drawing their pensions. Changes within the public sector and to the LGPS itself may affect the maturity profile of the LGPS and have potential cash flow implications. For example,

- The implications of budget cuts and headcount reductions could reduce the active (contributing) membership and increase the number of pensioners through early retirements;
- An increased emphasis on outsourcing and other alternative models for service delivery may result in falling active membership (e.g. where new admissions are closed),
- Public sector reorganisations may lead to a transfer of responsibility between different public sector bodies, (e.g. to bodies which do not participate in the LGPS),
- Scheme changes and higher member contributions in particular may lead to increased opt-outs;

The Administering Authority seeks to maintain regular contact with employers to mitigate against the risk of unexpected or unforeseen changes in maturity leading to cashflow or liquidity issues.

Liability risk

The main risks include inflation, life expectancy and other demographic changes, and interest rate and pay inflation, which will all impact upon future liabilities.

The Administering Authority will ensure that the Fund Actuary investigates these matters at each valuation and reports on developments. The Administering Authority will agree with the Fund Actuary any changes which are necessary to the assumptions underlying the measure of solvency to allow for observed or anticipated changes.

The Fund Actuary will also provide quarterly funding updates to assist the Administering Authority in its monitoring of the financial liability risks. The Administering Authority will, as far as practical, monitor changes in the age profile of the Fund membership early retirements, redundancies and ill health early retirements and, if any changes are considered to be material, ask the Fund Actuary to report on their effect on the funding position.

If significant liability changes become apparent between valuations, the Administering Authority will notify all participating employers of the anticipated impact on costs that will emerge at the next valuation and consider whether to require the review the bonds that are in place for Admission Bodies.

Regulatory and compliance risk

Regulatory risks to the scheme arise from changes to general and LGPS specific regulations, taxation, national changes to pension requirements, or employment law.

The Administering Authority keeps abreast of all the changes to the LGPS and will normally respond to consultations on matters which have an impact on the administration of the Fund.

There are a number of uncertainties associated with the benefit structure at the current time including:

- How Government will address the issues of GMP indexation and equalisation for the LGPS beyond expiry of the current interim solution from 6 April 2021
- The remedy to compensate members for illegal age discrimination following the outcome of the McCloud/Sargeant cases. Whilst the Government's application for leave to appeal has been denied there is currently still uncertainty relating to the remedy and exactly how this will apply to the LGPS
- The outcome of the cost management process and whether the agreement reached in relation to the Scheme Advisory Board (SAB) process for member contributions to be reduced and benefits enhanced to achieve an additional cost of 0.9% of pay will change as a result of the McCloud/Sargeant ruling

In determining how these uncertainties should be allowed for in employer contributions from 1 April 2020 the Administering Authority will have regard to guidance issued by the SAB, taking account of the Fund Actuary's advice.

In addition, a consultation document was issued by MHCLG entitled "Local Government Pension Scheme: Changes to the Local Valuation Cycle and the Management of Employer Risk" dated May 2019. This included a proposal to change the LGPS local fund valuations to quadrennial cycles. The Administering Authority will have regard to any changes in the Regulations as a result of this consultation and consider any actions required at the 2019 valuation, taking account of the Fund Actuary's advice.

8. MONITORING AND REVIEW

The Administering Authority has taken advice from the actuary in preparing this Statement, and has also consulted with employing organisations.

A full review of this Statement will occur no less frequently than every three years, to coincide with completion of a full actuarial valuation. Any review will take account of then current economic conditions and will also reflect any legislative changes.

The Administering Authority will monitor the progress of the funding strategy between full actuarial valuations. If considered appropriate, the funding strategy will be reviewed (other than as part of the triennial valuation process), for example:

- if there has been significant market volatility
- if there have been significant changes to the NYPF membership and/or maturity profile
- if there have been changes to the number, type or individual circumstances of any of the employing authorities to such an extent that they impact on the funding strategy e.g. closure to new entrants
- where employers wish to make additional (voluntary) contributions to the NYPF
- if there has been a material change in the affordability of contributions and/or employer financial covenant strength
- to reflect significant changes to the benefit structure / Regulations

North Yorkshire County Council as Administering Authority for the North Yorkshire Pension Fund

APPENDIX 1

ACTUARIAL VALUATION AS AT 31 MARCH 2019 Method and assumptions used in calculating the funding target

Risk Based Approach

The Administering Authority adopts a risk based approach to funding strategy. In particular the discount rate (for most employers) has been set on the basis of the assessed likelihood of meeting the funding objectives. The Administering Authority has considered 3 key decisions in setting the discount rate:

- the long-term Solvency Target (i.e. the funding objective where the Administering Authority wants the Fund to get to);
- the Trajectory Period (how quickly the Administering Authority wants the Fund to get there), and
- the Probability of Funding Success (how likely the Administering Authority wants it to be now that the Fund will actually achieve the Solvency Target by the end of the Trajectory Period).

These three choices, supported by complex (stochastic) risk modelling carried out by the Fund Actuary, define the discount rate (investment return assumption) to be adopted and, by extension, the appropriate employer contributions payable. Together they measure the riskiness (and hence also the degree of prudence) of the funding strategy. These are considered in more detail below.

Solvency Target

The Administering Authority's primary aim is the long-term solvency of the Fund. Accordingly, employers' contributions will be set to ensure that 100% of the liabilities can be met over the long term using appropriate actuarial assumptions.

The Administering Authority believes that its funding strategy will ensure the solvency of the Fund because employers collectively have the financial capacity to increase employer contributions should future circumstances require, in order to continue to target a funding level of 100%.

For most Scheduled Bodies and Admission Bodies where a Scheme Employer of sound covenant has agreed to subsume the Admission Body's assets and liabilities in the NYPF following its exit, the Solvency Target is set:

- at a level advised by the Fund Actuary as a prudent long-term funding objective for the Fund to achieve at the end of the Trajectory Period,
- based on continued investment in a mix of growth and matching assets intended to deliver a return above the rate of increases to pensions and pension accounts (CPI).

As at 31 March 2019 the long-term rate of CPI is assumed to be 2% p.a. and a prudent long-term investment return of 2% above CPI is assumed.

This then defines the Solvency Target. As at 31 March 2019 this equates to a solvency discount rate of 4% p.a.

For Admission Bodies and other bodies whose liabilities are expected to be orphaned following cessation, a more prudent approach will be taken. The Solvency Target will be set by considering the valuation basis which would be adopted should the body leave the Fund. For most such bodies, the Solvency Target will be set commensurate with assumed investment in Government bonds after exit.

Probability of Funding Success

The Administering Authority considers funding success to have been achieved if the Fund, at the end of the Trajectory Period, has achieved the Solvency Target. The Probability of Funding Success is the assessed chance of this happening based on asset-liability modelling carried out by the Fund Actuary.

With effect from 31 March 2019 the discount rate, and hence the overall required level of employer contributions, has been set such that the Fund Actuary estimates there is a 80% chance that the Fund would reach or exceed its Solvency Target after 25 years (the Trajectory Period)

Funding Target

The Funding Target is the amount of assets which the Fund needs to hold at the valuation date to pay the liabilities at that date as indicated by the chosen valuation method and assumptions and the valuation data. The valuation calculations, including the primary contribution rates and adjustment for the surplus or deficiency, set the level of contributions payable and dictate the chance of achieving the Solvency Target at the end of the Trajectory Period. The key assumptions used for assessing the Funding Target are summarised below.

Consistent with the aim of enabling the primary rate of employers' contribution rates to be kept as nearly constant as possible, contribution rates are set by use of the Projected Unit valuation method for most employers. The Projected Unit method is used in the actuarial valuation to determine the cost of benefits accruing to the Fund as a whole and for employers who continue to admit new members. This means that the contribution rate is derived as the cost of benefits accruing to employee members over the year following the valuation date expressed as a percentage of members' pensionable pay over that period. The future service rate will be stable if the profile of the membership (age, gender etc) is stable.

For employers who no longer admit new members, the Attained Age valuation method is normally used. This means that the contribution rate is derived as the average cost of benefits accruing to members over the period until they die, leave the Fund or retire. This approach should lead to more stable employer contribution rates than adoption of the Projected Unit method for closed employers.

Funding Targets and assumptions regarding future investment strategy

For Scheduled Bodies whose participation in the Fund is considered by the Administering Authority to be indefinite and Admission Bodies with a subsumption commitment from such Scheduled Bodies, the Administering Authority assumes indefinite investment in a broad range of assets of higher risk than risk free assets.

For other Scheduled Bodies, in particular the Colleges and Universities whose participation is not considered to be indefinite, the Administering Authority may without limitation, take into account the following factors when setting the funding target for such bodies:

- the type/group of the employer
- the business plans of the employer;
- an assessment of the financial covenant of the employer;
- any contingent security available to the Fund or offered by the employer such as a guarantor or bond arrangements, charge over assets, etc.

For Admission Bodies and other bodies whose liabilities are expected to be orphaned on exit (with the exception of the universities where a different approach will be adopted at the 2019 valuation as set out below), the Administering Authority will have regard to the potential for participation to cease (or for the body to have no contributing members), the potential timing of such exit, and any likely change in notional or actual investment strategy as regards the assets held in respect of the body's liabilities at the date of exit (i.e. whether the liabilities will become 'orphaned' or a guarantor exists to subsume the notional assets and liabilities).

Colleges and Universities

Due to concerns about the covenant strength of Colleges and Universities, the Administering Authority will, from the 2019 valuation onwards, adopt a Funding Target for Colleges and Universities which reflects the Administering Authority's views of the sector. This includes the two universities that are Admission Bodies in the Fund where there is no subsumption commitment, but which continue to admit new members to the Fund.

Whilst the Administering Authority will adopt a general approach of assuming indefinite investment in a broad range of assets of higher risk than Government bonds, a reduction will be made to the discount rate used for the long-term secure scheduled bodies to reflect concerns about the covenant strength of Colleges and Universities. This is known as the Intermediate Funding Target.

The Administering Authority may also adopt the Intermediate Funding Target for other employers where there are concerns about the covenant strength of the employer. At the 2019 valuation this decision will be informed by the high-level risk analysis of employers within the Fund carried out by the Fund Actuary.

The Fund is deemed to be fully funded when the assets are equal to or greater than 100% of the Funding Target, where the funding target is assessed based on the sum of the appropriate funding targets across all the employers/groups of employers.

Financial assumptions

Investment return (discount rate)

The discount rate for the 2019 valuation is as follows:

- 4.2% p.a. for employers where the Scheduled body / subsumption funding target applies
- 3.8% p.a. for employers where the Intermediate funding target applies
- 3.3% in service (equivalent to the yield on long-dated fixed interest gilts at a duration appropriate for the Fund's liabilities plus an asset out-performance assumption of 2% p.a.) and 1.6% left service (which is intended to be equivalent to the yield on long-dated fixed interest gilts at the valuation date but which has, in the interests of affordability and stability of employer contributions, been increased by 0.3% p.a. to take account of market expectationsof future increases in gilt yields after the valuation date), for employers where the Ongoing orphan funding target applies.

Inflation (Consumer Prices Index)

The CPI inflation assumption is taken to be the long-term (30 year) Capital Market Assumption at the valuation date as produced by Aon Hewitt Limited. In formulating the Capital Market Assumption, both consensus forecasts and the inflation risk premium are considered.

Salary increases

The assumption for real salary increases (salary increases in excess of price inflation) in the long term will be determined by an allowance of 1.25% p.a. over the inflation assumption as described above plus an allowance for promotional increases.

Pension increases/Indexation of CARE benefits

Increases to pensions are assumed to be in line with the inflation (CPI) assumption described above. This is modified appropriately to reflect any benefits which are not fully indexed in line with the CPI (e.g. Guaranteed Minimum Pensions in respect of service prior to April 1997).

Demographic assumptions Post-retirement Mortality

Base Rates

Normal Health: Standard SAPS S2N tables, year of birth base rates, adjusted by a scaling factor. Ill-health: Standard SAPS S2 Ill-health tables, year of birth base rates adjusted by a scaling factor.

Scaling Factors

Rates adjusted by scaling factors as dictated by Fund experience

Males (normal health)	105%
Females (normal health)	105%
Males (ill-health)	105%
Females (ill-health)	115%

Future improvement to base rates

An allowance for improvements in line with the CMI 2018, for men or women as appropriate, with a long term rate of improvement of 1.50% p.a., s_k of 7.5 and parameter A of 0.0.

Pre-retirement mortality

Males:As for normal health retirements but with a 40% scaling factorFemales:As for normal health retirements but with a 30% scaling factor

Retirement age

The assumed retirement age is dependent on the Group of the member and also the member's Rule of 85 age (Ro85 age).

Member group	Assumed age at retirement
Group 1 and Group 2 members	63
Group 3 members (Ro85 age = 60)	63
Group 3 members (Ro85 age > 60)	65
Group 3 members (Joiners pre 1 April 2014)	65
Group 4 members (Joiners post 31 March 2014)	State Pension Age

Any part of a members' pension payable from a later age than the assumed retirement age will assumed to be reduced using factors issued by GAD / MHCLG in force on the valuation date.

Withdrawals

Allowance is made for withdrawals from service. On withdrawal, members are assumed to leave a deferred pension in the Fund and are not assumed to exercise their option to take a transfer value.

Retirement due to ill health

Allowance is made for retirements due to ill health. Proportions assumed to fall into the different benefit tiers applicable after 1 April 2008 are:

Tier 1 (upper tier)	90%
Tier 2 (middle tier)	5%
Tier 3 (lower tier)	5%

Family details

A man is assumed to be 3 years older than his spouse, civil partner or cohabitee. A woman is assumed to be 3 years younger than her spouse, civil partner or cohabite.

80% of non-pensioners are assumed to be married / cohabitating at retirement or earlier death. 80% of pensioners are assumed to be married / cohabitating at age 65.

Commutation

Each member is assumed to take cash such that the total cash received (including statutory 3N/80 lump sum) is 75% of the permitted maximum amount permitted of their past service pension entitlements.

Take up of 50/50 scheme

All members are assumed to remain in the scheme they are in at the date of the valuation.

Promotional salary increases

Allowance is made for age-related promotional increases.

Expenses

0.5% of Pensionable Pay added to the cost of future benefit accrual.

Summary of key whole Fund assumptions used for calculating funding target and cost of future accrual (the "primary contribution rate") for the 2019 actuarial valuation

Investment return / Discount Rate (scheduled bodies and admission bodies with a subsumption commitment from a scheduled body)	4.2% p.a.
Investment return / Discount Rate (intermediate funding target)	3.8% p.a.
Investment Return / Discount Rate for orphan bodies	
In service	3.3% p.a.
Left service	1.6% p.a.
CPI price inflation	2.1% p.a.
Long Term Salary increases	3.35% p.a.
Pension increases/indexation of CARE benefits	2.1% p.a.