Scheme funding report: Actuarial valuation of the Cheshire & Derbyshire Section of the Nationwide Pension Fund

As at 31 March 2022

Nationwide
Pension Fund

Scheme funding report

Actuarial valuation of the Cheshire & Derbyshire Section of the Nationwide Pension Fund at 31 March 2022

Prepared for: Nationwide Pension Scheme Trustee Limited
Prepared by: Keith Poulson FIA
Date: 22 March 2023

QAS Institute and Faculty of Actuaries ® Quality Assurance Scheme

AON

Introduction

Why bring you this report?

Section 224(2)a of the Pensions Act 2004 requires the Trustee to receive this formal report from me (as Scheme Actuary) setting out the results and conclusions from the actuarial valuation of the C&D Section at 31 March 2022.

My report summarises the key aspects of the valuation process, including:

- The funding objective and background details
- The technical provisions
- The agreed contributions
- The results on the solvency basis.
- Further information is provided for compliance purposes, including:
  - The legal framework within which the valuation has been completed
  - A summary of the membership and assets data, the benefits valued and details of the assumptions used for the valuation
  - My statutory certification of the technical provisions
  - A glossary of some technical pensions terms.

Defined contribution (DC) benefits (including DC AVCs) have been **excluded** from the valuation results because in my view this provides a clearer picture.

Next steps

Some key deadlines are highlighted on the right.

The valuation process is complete when all the following have been agreed and are in place:

- This scheme funding report, including my certification of the technical provisions
- Schedule of contributions, including my actuarial certification of the adequacy of the schedule of contributions.

Keith Poulson

22 March 2023

Signature **Date**

Key deadlines

A copy of this report must be provided to the Society as is required within 7 days of receiving it.

Within 10 days: The valuation summary and supporting documentation to the recovery plan must be submitted to The Pensions Regulator via Exchange.

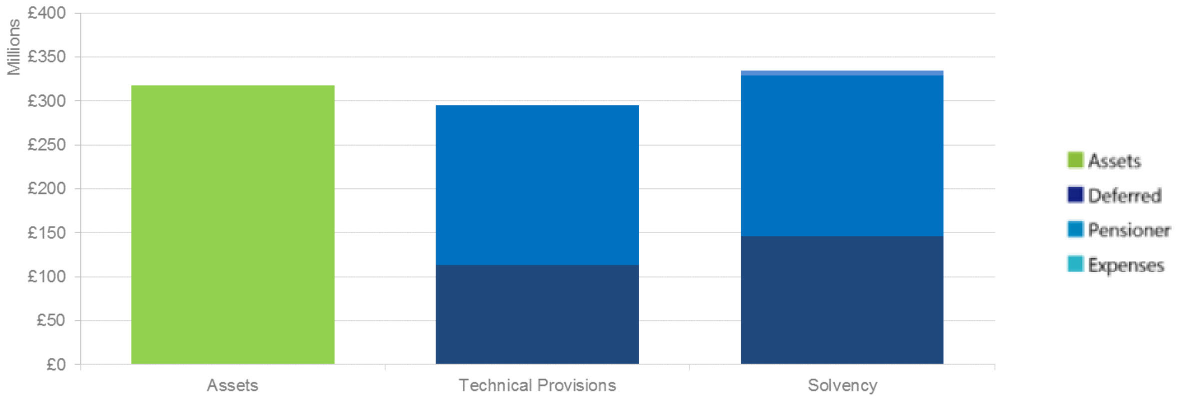
By 30 September 2023: A summary funding statement must be provided to members within 18 months of the valuation date.

By 31 March 2025: The **next** actuarial valuation must be completed with an effective date no later than 31 March 2025 (i.e. three years after the effective date of this valuation).

At a glance…

As your Scheme Actuary, I have carried out an actuarial valuation of the C&D Section at 31 March 2022.

Funding summary



Technical provisions

£22M

Surplus

Solvency estimate

(£17M)

Deficit

Low Dependency

£18M

Surplus

Contributions

The C&D Section closed to future accrual with effect from 1 April 2011. As a result, there are no regular contributions payable to the C&D Section.

As the Section remains in a surplus no contributions are payable to the Section, other than the cost augmentations (if any).

The expenses of running the Section (including the PPF and other levies) are met by the assets of the Section.

Important

The report concentrates on the Section's financial position at the valuation date. As time moves on, the Fund's finances will fluctuate.

If you are reading this report some time after it was produced, the Fund's financial position could have changed significantly.

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Background to your actuarial valuation

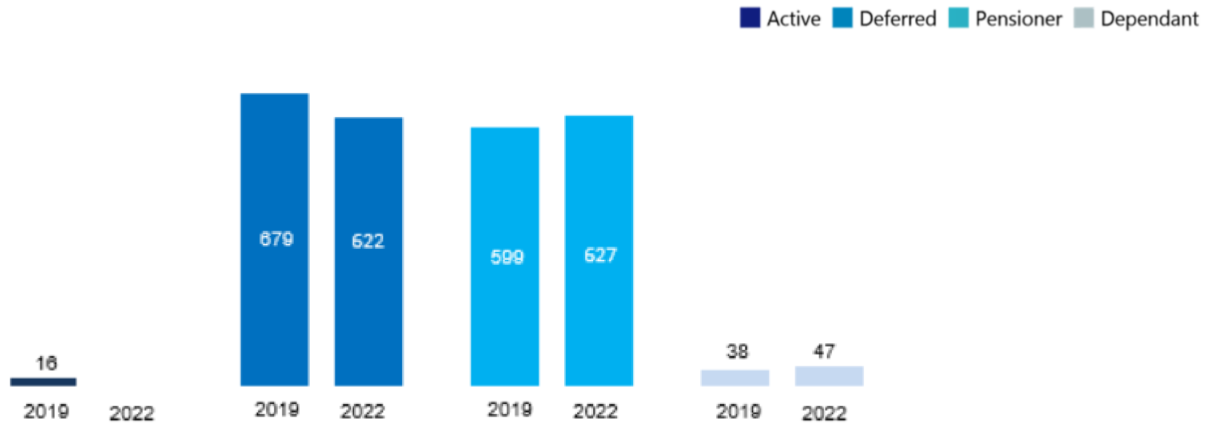
Data and benefits valued

Your actuarial valuation was based on a snapshot of member data and my understanding of the C&D Section's benefits.

Member data

The C&D Section has continued to become increasingly mature with the proportion of pensioners increasing.

Further details of the membership data used for the actuarial valuation calculations are provided in an appendix.



Benefits

Members are entitled to the benefits defined in the Rules. A summary of the benefits is included in an appendix.

In valuing these benefits, I have applied some judgment in the following key areas:

GMP equalisation

An approximate allowance for equalising GMPs is made by adding 1% to the C&D Section's technical provisions and solvency basis liability. This includes an approximate allowance for both past and future benefit payments.

This is consistent with the approach at the previous valuation.

Discretionary benefits

Under the provision of the Rules, there are certain discretionary powers to provide or increase benefits, or in respect, of, all of any of the members of the C&D Section.

No allowance is made for such benefits.

Insured benefits

The vast majority of the benefits in respect of the C&D Section’s pensioners and dependants were secured with Canada Life in 2021.

The value of these contracts is included in the asset value and so the corresponding benefits for members are included in the valuation.

The value of assets is taken to be the same as the value of the liabilities for members covered by insurance contracts.

Funding objectives and investment strategy

The Trustee's funding objective is to hold assets which are at least equal to the technical provisions (i.e. to meet the statutory funding objective).

Your funding target

The Trustee currently has a long term objective to be 100% funded on the Low Dependency basis (in line with the technical provisions basis but with a lower discount rate of gilts + 0.2% p.a.). The C&D Section is already fully funded on this measure which therefore permits the C&D Section to have low dependency on the employer for ongoing financial support thereafter. This is separate from the statutory funding objective, however as it is a key measure for the C&D Section, the low dependency funding results are included in this report.

Employer covenant

A key factor in setting the level of the technical provisions is the Trustee's assessment of the employer covenant. The Trustee, with the support of Teneo, has carried out a review of the employer covenant and concluded that the employer covenant is tending to be **strong**.

The covenant strength rating is similar to when assessed for the previous valuation and this has been taken into account in setting the assumptions to be adopted for the technical provisions.

Investment strategy

The assets held are described in the appendix.

The Trustee's investment strategy is set out in its statement of investment principles. In summary, the Trustee's strategy is to invest 10-20% (of non-insured assets) of the C&D Section's assets in growth assets to generate investment returns.

The remaining 80-90% (of non-insured assets) is invested in liability-driven investments ('LDI'), the purpose of which is to reduce the risk of movements in market expectations of future interest rates and inflation having an adverse impact on the C&D Section's funding position.

Method & assumptions

The Trustee and the Society agreed the method and assumptions used to calculate the technical provisions liabiliites.

Assumptions

The table below summarises the key assumptions, together with those used for the previous valuation, and the reasons for any change.

Further details of all the assumptions are set out in the statement of funding principles.

Further information

Your Actuarial valuations handbook contains further information on valuation methods and Aon's approach to assumption setting.

Financial assumptions

Assumption	Previous valuation	This valuation	Rationale for change
Discount rate	Gilt yield curve plus 0.35% p.a.	No change other than move to gilts price only curves	Update for market conditions only.
RPI inflation	"Break-even" RPI curve with no inflation risk premium deduction	No change other than move to gilts price only curves	Update for market conditions only.
CPI inflation	RPI inflation less 0.9% p.a.	RPI inflation less 0.9% p.a. before 2030 and less 0.1% p.a. thereafter	Reflects change in Aon's best-estimate of the future long-term difference between RPI and CPI.
Pension increases	Consistent with inflation assumptions and allowing for Aon best-estimate of future inflation uncertainty		Update for market conditions and latest views only.

The* ***Low Dependency* *basis is the same as the technical provisions basis but with a lower discount rate of gilts + 0.2% p.a..*

Mortality assumptions

Assumption	Previous valuation	This valuation	Rationale for change
Post retirement mortality			
Base tables			
Deferred males	95%% of S3PMA[1]	94% of S3PMA[2]	Update for latest Demographic Horizons analysis.
Deferred females	101% of S3PFA_M[1]	102% of S3PFA_M[2]	
Pensioner males	90% of S3PMA[1]	90% of S3PMA[2]	
Pensioner females	96% of S3PFA_M[1]	97% of S3PFA_M[2]	
Dependant males	96% of S3PMA[1]	93% of S3PMA[2]	
Dependant females	90% of S3PFA_M[1]	99%% of S3PFA_M[2]	
Future contingent of deferred males	95% of S3PFA_M[1]	94% of S3PFA_M[2]	
Future contingent of deferred females	101% of S3PMA[1]	102% of S3PMA[2]	
Future contingent of pensioner males	90% of S3PFA_M[1]	90% of S3PFA_M[2]	
Future contingent of pensioner females	96% of S3PMA[1]	97% of S3PMA[2]	
Mortality Improvements	CMI_2018 core projections with SK=7.0, A=0.50 and a long-term improvement rate of 1.5% p.a.	CMI_2021 core projections with SK=7.0, W2020=0%, W2021=0%, A=0.50 and a long-term improvement rate of 1.5% p.a.	Update for latest best estimate of longevity projections
Pre-retirement mortality	70% of AM92 Ultimate for men, 70% of AF92 Ultimate for women	70% of AM92 Ultimate for men, 70% of AF92 Ultimate for women	No change

Other assumptions

<table>
<tr><th>Assumption</th><th>Previous valuation</th><th>This valuation</th><th>Rationale for change</th></tr>
<tr><td>Commutation</td><td>20% of pension on then current commutation factors but uplifted by 15%</td><td>20% of pension on current commutation factors</td><td>Update in line with experience analysis</td></tr>
<tr><td>Eligible dependant proportion</td><td>90% of men and 75% of women at retirement or earlier death</td><td>85% of men and 80% of women at retirement or earlier death</td><td>Update in line with experience analysis</td></tr>
<tr><td>Eligible dependant characteristics</td><td>An eligible dependant is assumed to be of the opposite sex and 3 years younger than a male member and 1 years older than a female member</td><td>An eligible dependant is assumed to be of the opposite sex and 3 years younger than a male member and 1 year older than a female member</td><td>No change</td></tr>
<tr><td>Discretionary benefits</td><td>No allowance</td><td></td><td>No change</td></tr>
<tr><td>Early retirement</td><td>Age based scale from deferred:<table><tr><th>Age</th><th>NRA 60</th><th>NRA 65</th></tr><tr><td>55-59</td><td>15% p.a.</td><td>15% p.a.</td></tr><tr><td>60</td><td>100%</td><td>15%</td></tr><tr><td>61-64</td><td></td><td>15% p.a.</td></tr><tr><td>65</td><td></td><td>100%</td></tr></table></td><td>Age based scale from deferred:<table><tr><th>Age</th><th>NRA 60</th><th>NRA 65</th></tr><tr><td>55-59</td><td>10% p.a.</td><td>10% p.a.</td></tr><tr><td>60</td><td>100%</td><td>10%</td></tr><tr><td>61-64</td><td></td><td>15% p.a.</td></tr><tr><td>65</td><td></td><td>100%</td></tr></table></td><td>Update in line with scheme experience</td></tr>
<tr><td>Expense reserve</td><td>None</td><td>None</td><td>No change</td></tr>
<tr><td>GMP equalisation</td><td colspan="2">1% allowance for the impact of GMP equalisation within the liabilities.</td><td>No change</td></tr>
</table>

Valuation results

Past service results

The C&D Section's technical provisions and low dependency liabilities and resulting funding positions have been calculated at 31 March 2022.

Results

	Technical provisions (£M)	Low dependency (£M)
Value of past service benefits for:		
Deferreds	113	117
Pensioners: non-insured	24	24
Pensioners - insured	158	162
Expenses	0	0
Value of liabilities	295	303
Value of assets*	317	321
Past service surplus/(deficit)	**22**	18
Funding level	**107%**	106%

* Note the value of insured assets has been taken to be equal to the value of insured liabilities on the relevant basis, hence the asset value changes slightly between bases.

My formal certificate of your technical provisions is included in this report.

Sensitivity of the funding level

The key assumptions are the discount and inflation rates. The sensitivity of the funding level to these key assumptions is as follows:

Discount rate decreases by 0.25%

A 0.25% p.a. decrease in the discount rate increases the technical provisions funding by c£12M.

RPI inflation increases by 0.25%

A 0.25% p.a. increase in the RPI inflation assumption (and the knock-on impact on the other assumptions derived from it) increases the technical provisions by c£5M.

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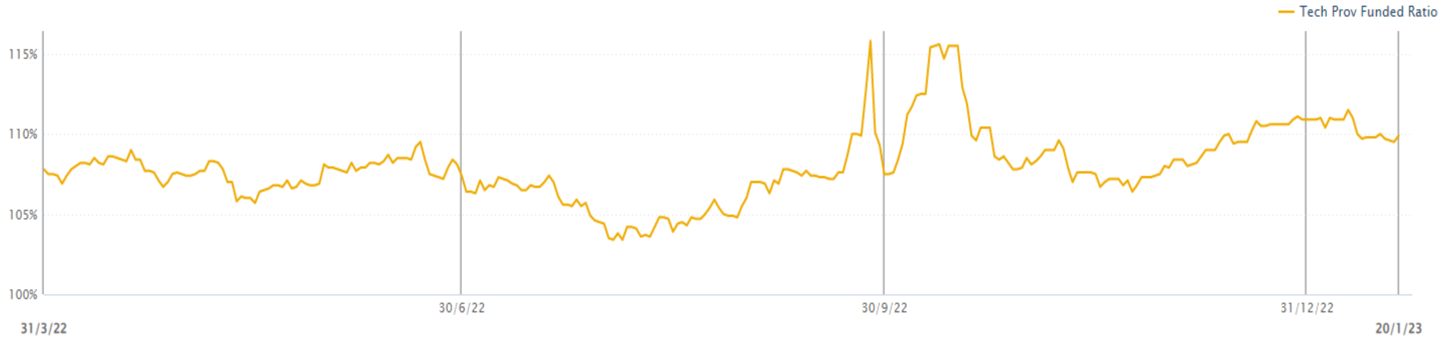
Approximate developments since the valuation date

Since the valuation date, the C&D Section's funding position is estimated to have been relatively stable.

The chart below illustrates how the position has changed over time.

Note that this is more approximate than a full valuation, for example mortality experience for this period has been assumed to be in line with the assumptions.

This value of the C&D Section’s liabilities is based on assumptions consistent with those used to calculate the technical provisions, with financial assumptions updated to reflect changes in market conditions.



Reflecting post-valuation experience

No post valuation date experience has been allowed for other than when considering the likely future commutation factors to be adopted by the Section, latest market conditions have been considered.

Solvency Position

I have estimated the C&D Section's statutory solvency position.

Results

	Solvency (£M)
Value of past service benefits for:	
Deferreds	146
Pensioners: non-insured	24
Pensioners - insured	159
Expenses	6
Value of liabilities	335
Value of assets*	318
Past service surplus/(deficit)	(17)
Funding level	95%

* Note the value of insured assets has been taken to be equal to the value of insured liabilities on the relevant basis, hence the asset value changes slightly between bases.

This solvency estimate represents the estimated cost of purchasing annuities at the valuation date from an insurance company to meet the Section's benefits.

The assumptions used in the solvency estimate are summarised in an appendix. Note we have assumed no reduction in assets as a result of forced sales. In reality some of the less liquid assets may be difficult to sell and if making any decisions on the solvency position this should be considered in more detail.

In practice

Supply and demand factors mean that the actual cost of purchasing annuities may be different to the above solvency estimate.

If the Section were to be discontinued with no solvent employer, the assets may be insufficient to provide the benefits in full. If this were the case then:

- Benefits corresponding to those covered by the PPF would be met first (either through the PPF or, if there were sufficient funds, by securing these benefits with an insurance company).
- Any remaining assets would be used to secure part of the remaining benefits with an insurance company.

The proportion of full benefits provided will vary from member to member and may be higher or lower than the statutory estimate of solvency quoted above.

Why higher?

The solvency estimate is higher than the technical provisions.

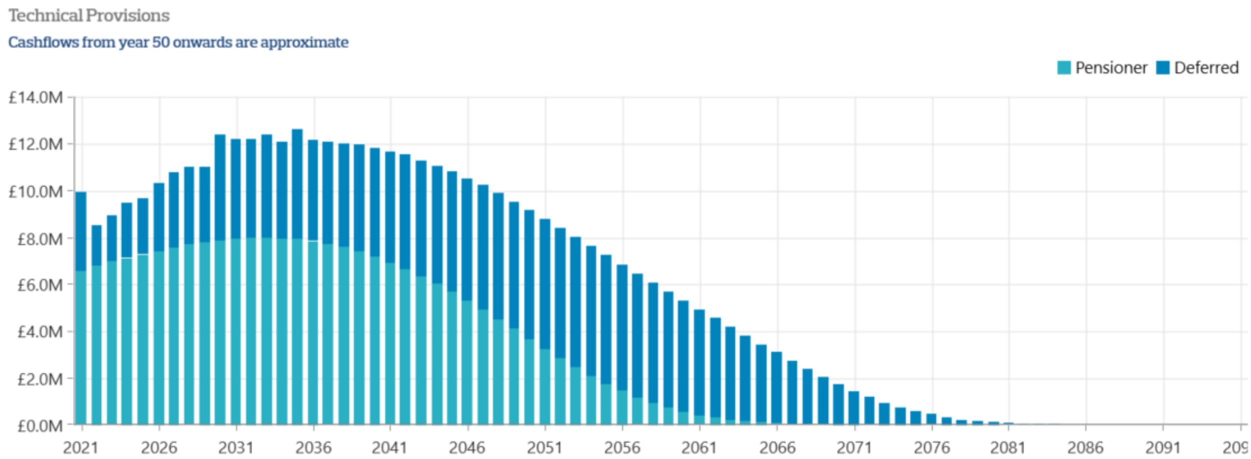
Broadly, this is for the following reasons:

- Insurers will typically hold less risky assets which provide **lower investment returns** than are expected to be achieved on the C&D Section's assets
- Insurers typically hold **larger margins**, for example by assuming that members will live longer than is assumed in calculating the technical provisions
- Insurers need to cover **costs**, including administering the benefits, and also make a **profit**, and
- Allowance is made for the **cost of winding up** the C&D Section.

Funding and investment risks

The C&D Section's funding level is likely to exhibit volatility.

The benefit payments from the C&D Section are expected to be made for a very long period. The chart below shows the projected cashflows on the technical provisions basis for the C&D Section.



Key risks

The C&D Section faces a number of key risks which could affect its future cashflows and funding position, including:

Funding risk

The risk that the technical provisions are set too low and prove insufficient to meet the liabilities (e.g. in the event of unexpected discontinuance).

Investment risk

The risk that investment returns are lower than assumed in the valuation, and also that the assets are volatile and move out of line with the liabilities, so the funding position is volatile.

Liquidity risk

The risk that the assets held are not sufficiently liquid leading to the sale of assets at inopportune times.

Longevity risk

The risk that members live for longer than assumed and that pensions would therefore need to be paid for longer.

Inflation risk

The risk that the relevant inflation metric is higher than assumed, increasing the pensions that need to be paid (to the extent inflation is unhedged).

Sponsor risk

This is the risk that the sponsor is no longer willing or able to support the Fund to fund any future losses that arise.

Other risks

The C&D Section is exposed to other risks too, which may also impact on the funding, investments and sponsor covenant:

- **Insurer default risk**: Around half of the Section's assets are secured with Canada Life as a result of the bulk annuity purchase. The insurance regime is very secure with high reserving levels and FCA protection however this has never been tested and there is therefore a very small risk of loss on the value of the assets as a result of insurer default
- **Member options risk**: The risk that members exercise options resulting in unanticipated extra costs.
- **Concentration risk:** The risk of a significant effect on the total liabilities due to the experience of only a small number of members.
- **Small scheme risk:** Schemes with relatively few members cannot pool risk to the same extent as larger schemes and so are more susceptible to random variations.
- **Other risks:** For example, those relating to climate change and other environmental issues as well as long-term uncertainty around geopolitical, societal and technological shifts.

Risk mitigation

The Trustee takes an integrated approach to managing the C&D section's risks. The key actions taken to mitigate the risks include:

Investment

- Adopting a diversified investment strategy.
- Investing in liability-driven investments, so that changes in the value of the liabilities will be partially matched by changes in the asset values, thus reducing the funding volatility.

Covenant

- As well as obtaining a covenant review at the time of a triennial valuation, the Trustee monitors the covenant position between valuations by receiving regular updates from the Society.

Funding

- Setting a funding and investment strategy under which the C&D Section aims to reduce its dependence on the sponsor's continuing financial support.
- Purchasing a bulk annuity policy to eliminate investment and mortality risk in relation to the corresponding members. Note although this introduces the potential for insurer default risk this is viewed as low given the reserving requirements insurers operate under.
- Making prudent assumptions in the technical provisions.

Future contributions

Agreed contributions

As a result of this valuation, the Society has agreed a new contribution schedule.

Society contributions

As the C&D Section is in surplus no contributions are payable by the Society, other than the cost of augmentations (if any).

Currently, the expenses of running the C&D Section (including the PPF and other levies) are met by the assets of the Section.

Schedule of contributions

These contributions are set out in the schedule of contributions.

As agreed, my certification of the schedule is based on the position at the valuation date.

A full review of the Society's contributions will be completed no later than following the next valuation, which is due to take place at 31 March 2025.

Projections

I have illustrated below how I expect the C&D section's funding position to develop over the future.

Projected future funding levels

I estimate that, by the next valuation, which will be due with an effective date of 31 March 2025:

- The **technical provisions** funding level will remain above 100%, and
- The **solvency** level will improve to be close to 100% funded.

Assumptions

These estimates assume that:

- The experience of the C&D Section between the two valuation dates is in line with the assumptions underlying the technical provisions.
- The assumptions underlying the technical provisions and solvency bases remain unchanged.

Rationale

The main reasons for the expected improvement in the solvency position are:

- The solvency assumptions typically containing more prudence.
- The Section maturing, particularly members retiring which removes uncertainty and so improves the terms of annuity purchase.
- Investment growth on the assets, above the discount rates assumed in the solvency calculations.

Certificate

Certificate of technical provisions

Actuarial certificate given for the purposes of Regulation 7(4)(a) of the Occupational Pension Schemes (Scheme Funding) Regulations 2005

Cheshire & Derbyshire Section of the Nationwide Pension Fund

Calculation of technical provisions

I certify that, in my opinion, the calculation of the scheme's technical provisions as at 31 March 2022 is made in accordance with regulations under section 222 of the Pensions Act 2004.

The calculation uses a method and assumptions determined by the Trustee of the Fund and set out in the statement of funding principles dated 20 March 2023.

Keith Poulson

	22 March 2023
Signature	**Date**

Name	Keith Poulson FIA
Employer	Aon Solutions UK Limited
Qualification	Fellow of the Institute & Faculty of Actuaries
Address	Aon Verulam Point, Station Way
	St Albans, Hertfordshire
	AL 1 5HE

Further information

Reference appendices and glossary

Membership data

The results in this report are based on the membership data summarised below.

The Nationwide administration team supplied membership data as at 30 June 2021 (an early data cut was requested due to the buy-in being completed during 2021).

I have conducted high level checks on the membership data provided and I am satisfied with its adequacy for the purpose of this actuarial valuation.

Active members	Number	Average age	Total Pensionable Salaries (£000 pa)	Average Pensionable Salaries (£ pa)	Average Pensionable Service (years)
2019	16	50.4	410	25,605	16.3
2021	0	-	-	-	-

Note: Note: There are no active members due to the Nationwide Section closure on 31 March 2021. The members showing as active in 2019 were no longer accruing benefits in the C&D Section, but their pre-11 entitlements under the C&D Section continued to be linked to their subsequent salary levels. The average pensionable service quoted is based on service to 31 March 2011 only.

Deferred members	Number	Average age	Total pension (£000 pa)	Average pension (£ pa)
2019	679	50.1	3,313	4,879
2021	622	51.7	3,112	5,003

Note: The deferred pension amounts include revaluations up to the valuation date.

Pensioners	Number	Average age	Total pension (£000 pa)	Average pension (£ pa)
2019	599	68.8	5,724	9,555
2021	627	70.2	6,177	9,852

Dependants	Number	Average age	Total pension (£000 pa)	Average pension (£ pa)
2019	38	72.2	282	7,414
2021	47	74.4	458	9,748

Note (pensioners and dependants): The pension amounts shown above exclude increases awarded after 1 July 2021. Included within the pensioner and dependant data above are 622 pensioners and dependants in respect of whom you have purchased a matching annuity.

The average ages shown in these tables are unweighted.

We have allowed for the time difference between the date of the data extract and the valuation date by allowing approximately for any cashflows out of the plan (eg CETVs and cash commutation).

Benefits valued

A summary of the key details of the fund benefits considered in this valuation is set out below.

Introduction

The C&D Section closed to future accrual after 31 March 2011. Benefits summarised in this Appendix cover service up to 31 March 2011 only. Future benefit accrual after 31 March 2011 is provided in the Nationwide Section.

Normal Retirement Age

For Cheshire members — Age 60

For Derbyshire members — Age 60 for pre-1 February 2006 service and Age 65 for post-1 February 2006 service

Early Retirement Pension

A pension is provided on retirement after the age of 55 with Society consent. This is reduced to allow for early payment.

Lump Sum

A member may exchange some of their pension for a lump sum on retirement. If a member dies after retiring, the following benefits may be paid:

- A lump sum equal to the balance of five years' pension, if the member dies within five years of drawing their pension.
- A dependant's pension of 50% of the member's pension.
- Children's benefits.

Incapacity and Ill Health Pensions

In the event of premature retirement due to serious ill health or incapacity, an immediate pension may be paid at the Society's discretion.

Pension Increases

For Cheshire members:

- The majority of Cheshire members receive pension increases at the fixed rate of 5% per annum.
- Some members have pension increases in line with RPI inflation increases with a minimum of 0% and a maximum of 5% or 2.5% each year.

For Derbyshire members:

- RPI increases with a minimum of 3% and a maximum of 5% each year (for benefits accrued before 1 July 1997)
- Increases with a minimum of 0% and a maximum of 5% each year (for benefits accrued from 1 July 1997 to 1 February 2006)
- RPI increases with a minimum of 0% and a maximum of 2.5% each year (for benefits accrued from 1 February 2006).

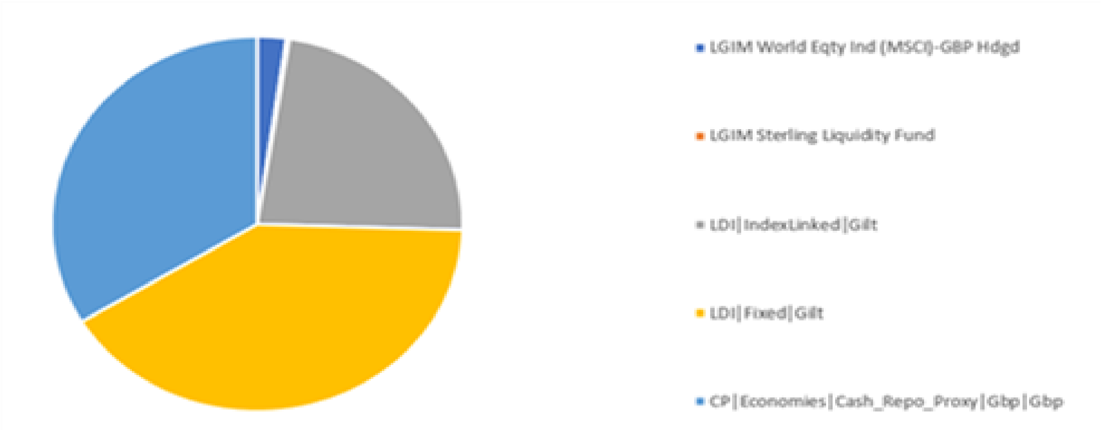
Assets

Information on the assets used in this valuation is covered here.

The audited accounts for the C&D Section for the year ended 31 March 2022 show the assets were £318.2M, of which:

- Total net assets of the Section £318.3M from the audited accounts
- Less the value of AVC investments £0.1M from the audited accounts.
- This includes a value of £159.4M for members whose benefits are insured and therefore the invested assets were £158.8M.

The chart below shows an approximate split of the C&D Section’s non-insured assets between different asset classes (noting around 50% of the portfolio is now invested in the pensioner buy-in policy). This allocation is broadly in line with the current investment strategy set out in your statement of investment principles.



Previous valuation results

This page sets out the results and conclusions of the previous actuarial valuation of the C&D section at 31 March 2019.

Key results

The key results from the previous valuation at 31 March 2019 were:

- There was a surplus of £17M relative to the **technical provisions**, which corresponded to a funding level of 105%.
- There was an estimated deficit of £52M relative to the **solvency** liabilities.

Recovery plan

No Recovery Plan was required at the previous valuation as there was a surplus on the technical provisions.

Notable changes since the previous valuation

There have been no material changes to the C&D Section since the previous valuation, other than the pensioner buy-in referred to previously.

Analysis of the change since the previous valuation

I have analysed the change in the past service funding position from the previous valuation to this new one.

Past service changes

The position on the technical provisions basis has improved from a surplus of £17M at your previous valuation to a surplus £22M. The reasons for the change are:

- The assets increased to a greater extent than the liabilities by c£7M which was primarily driven by the profits from insuring members benefits at a lower cost than that being reserved for.
- This gain was partially offset by changes in demographic assumptions which increased the liabilities by £2M.

Solvency estimate: assumptions

The key assumptions used in calculating the solvency estimate are summarised below.

Statutory solvency estimate

The solvency estimate has been calculated in line with statutory requirements. I have taken into account the investment strategies that an insurer is likely to use to back its annuity business and the resulting pricing I would expect to see under the market conditions at the valuation date, taking into account the size of the C&D Section.

The solvency estimate considers the position if:

- The C&D section's liabilities were discontinued on the valuation date.
- Member benefits were crystallised.
- Discretionary benefits were suspended permanently.
- The assets were used to buy immediate and deferred annuities from an insurer.

Estimate vs actual cost

This estimate is only a guide. The true position can only be established by conducting a competitive buy-out auction and fully defining the scope and likely cost of a wind-up process for the C&D Section.

The solvency estimate is a regulatory requirement and also provides a useful benchmark against which the Trustee and others can assess the relative prudence of other funding measures.

The basis used is described below.

Assumption	Solvency
Discount rate for current pensioners in payment	Aon's Bulk Annuity Market Monitor yield curves for pensioners, which is constructed from swap and UK corporate bond market curves
Discount rate for current non-pensioners in payment (both before and after retirement)	Aon's Bulk Annuity Market Monitor yield curves for non-pensioners, which is constructed from swap and UK corporate bond market curves
RPI inflation	Term dependent rates derived from the RPI swap markets.
CPI inflation	RPI inflation less 0.75% p.a. to 2030 and 0.1% p.a. after 2030
Pension increases	Derived from the price inflation assumptions with allowance for caps and floors and with the aim of approximately reflecting the cost of hedging these increases using LPI-linked swaps
Post-retirement mortality	As for the technical provisions except using CMI_2020 projections with A=0.5 and Sk=7.0 and a long-term rate of improvement of 1.75% p.a. for both men and women
Commutation and discretionary benefits	No allowance
GMP equalisation	The same percentage addition to the liabilities is included as in the technical provisions calculation
Expenses of winding-up	Allowance made to cover the expenses and insurance company charges associated with winding-up .

Legal framework and compliance

Legal framework

This report is produced in compliance with:

- Rule 12.2 of the Fund’s Rules.
- Rule 3.5(2) of the Fund’s Rules.
- Section 224 of the Pensions Act 2004.
- The terms of the Scheme Actuary Agreement between the Trustee and me, on the understanding that it is solely for the benefit of the addressee.

TAS compliance

This document, and the work relating to it, complies with ‘Technical Actuarial Standard 100: Principles for Technical Actuarial Work’ (‘TAS 100’) and 'Technical Actuarial Standard 300: Pensions’ (‘TAS 300’).

The compliance is on the basis that the Nationwide Pension Fund Trustee Limited is the addressees and the only user and that the document is only to be used as a summary of the outcome of the valuation. If you intend to make any decisions after reviewing this document, please let me know and I will consider what further information I need to provide to help you make those decisions.

This document should be read in conjunction with:

- The Statement of Funding Principles dated 23 January 202
- My report “Actuarial Valuation at 31 March 2019”, dated 9 September 2020
- My report “Initial Assumptions Advice – 31 March 2022 Valuation” dated 15 March 2022
- My report “Nationwide Pension Fund 31 March 2022 valuation – Initial results”, dated 22 June 2022
- My report “Nationwide Pension Fund 31 March 2022 valuation – Summary of initial results and key decisions – Cheshire & Derbyshire Section”, dated 16 August 2022
- My report “Nationwide Pension Fund 31 March 2022 valuation – assumptions advice and initial results”, dated 17 August 2022
- The Aon document “Actuarial valuations handbook”, provided along with my report of 17 August 2022

If you require further copies of any of these documents, please let me know.

Glossary

This glossary explains some common terms from the actuarial valuation process. Not all of them may be used in your report.

Best estimate assumption

It is equally likely that actual experience will be better-than or worse-than such an assumption. Best estimate assumptions are subjective and therefore those referenced in one report may differ from best estimate assumptions derived elsewhere.

Bulk annuity policy

A bulk annuity is an insurance policy that is purchased by pension scheme trustees to cover the future payments of all, or a subset of members. It removes longevity, investment, interest rate and inflation risks associated with the benefits covered either as an asset of the scheme (a buy-in) or by issuance of individual policies to the members (a buy-out).

Consumer Prices Index (CPI)

Measure of UK price inflation published monthly by the Office of National Statistics. It is the Government's preferred measure of inflation. It is based on different items and weightings to the Retail Prices Index (RPI) and is also calculated using a different formula.

Deficit

This is the funding target less the value of assets. If the value of assets is greater than the funding target, then the difference is called the surplus.

Discretionary benefits

These are benefits which are not guaranteed under a scheme's rules and which are only granted to members at the discretion of the trustees and/or the sponsor.

Discount rate

This is used to place a present value on a future payment. A 'risk-free' discount rate is usually derived from the investment return achievable by investing in government gilt-edged stock. A discount rate higher than the 'risk-free' rate is often used to allow for some of the extra investment return that is expected from investing in assets other than gilts.

Duration of liabilities

The duration of a scheme's liabilities represents the average term to payment of the liabilities. In broad terms, if a scheme has a duration of 20 years, then it will respond to changes in discount rate in the same way that a single cashflow which is payable in 20 years' time would. In practice, there are several different technical definitions of duration.

Forward rate

A forward rate is a rate which is expected to apply over a future time period. For example, to discount a single payment from one future date (say, five years from now) back to a closer future date (say, three years from now).

Funding level (or funding ratio)

This is the ratio of the value of assets to the funding target.

Funding target

An assessment of the present value of the benefits that will be paid from the scheme in the future, normally based on pensionable service prior to the valuation date. Often, the funding target is equal to the technical provisions.

Future service contribution rate (FSCR)

Only relevant for schemes still open to accrual; this is the cost of benefits accruing expressed as a percentage of the members' pensionable pay.

Gilt yield curve

The term-dependent yields on gilts derived from fixed-interest gilts published by the Bank of England, which are extended by Aon for years beyond those published.

Guaranteed Minimum Pension (GMP)

Most schemes that were contracted out of the State Earnings Related Pension Scheme (SERPS) before April 1997 have to provide a pension for service before that date at least equal to the Guaranteed Minimum Pension (GMP). This is approximately equal to the SERPS pension that the member would have earned had the scheme not been contracted out. GMPs ceased to build up on 6 April 1997, when the legislation changed.

Hedging

A liability is said to be hedged if a scheme holds investments which respond in the same way as it does to changes in the risk being hedged (e.g. interest rates or inflation). Gilts and swaps are examples of investments which are commonly used to hedge liabilities.

Inflation risk premium (IRP)

The difference between the best estimate of future inflation and its market price.

Inflation uncertainty

Whilst, over the medium to long term, inflation is often considered to be reasonably stable, and a simple single assumption is often used for projections, in reality inflation can vary up and down significantly from one year to the next. This variation is sometimes referred to as inflation uncertainty.

Limited Price Indexation (LPI)

The Pensions Act 1995 required schemes to provide a minimum level of annual increase to pensions in payment. The minimum level is the smaller of 5% and the increase in inflation* and applies to the pension earned from 6 April 1997 to 5 April 2005. With effect from 6 April 2005, the cap for statutorily-required LPI for future service was reduced from 5% to 2.5%.
*Until 2010, inflation for the purpose of this minimum was defined with reference to changes in the Retail Prices Index. From 2011, inflation was defined with reference to changes in the Consumer Prices Index.

Mortality rate

A mortality rate measures the likelihood that an individual will die between one birthday and the next.

Mortality table

Mortality tables summarise mortality rates across all ages.

Present value

Actuarial valuations involve projections of pay, pensions and other benefits into the future. To express the value of the projected benefits in terms of a cash amount at the valuation date, the projected amounts are discounted back to the valuation date by a discount rate. This value is known as the present value. For example, if the discount rate was 6% a year and if we had to pay a lump sum of £1,060 in one year's time the present value would be £1,000.

Pension Protection Fund (PPF)

The PPF was established with effect from 6 April 2005. The PPF will normally take over the assets of a pension scheme in the event of its sponsor becoming insolvent and the scheme having insufficient assets to provide the PPF benefits. The PPF will not provide the scheme benefits in full. The PPF is financed by a levy on most defined benefit pension schemes. The PPF benefits are broadly 100% of benefits for pensioners over normal retirement age and 90% of benefits up to a cap for all other members. Pension increases granted on benefits are at lower levels than apply in many schemes, in particular, benefits earned before 6 April 1997 would not be given any pension increases within the PPF.

Recovery plan

Where a valuation shows a funding shortfall against the technical provisions, trustees must prepare a recovery plan setting out how they plan to meet the statutory funding objective.

Prudent assumption

It is more likely that actual experience will be better than a prudent assumption than that it will be worse. The value of the liabilities will be higher when measured using prudent assumptions than using best estimate assumptions.

RPI inflation curve

The term-dependent RPI inflation expectations derived from fixed-interest and index-linked gilts published by the Bank of England which are extended by Aon for years beyond those published.

Retail Prices Index (RPI)

Measure of UK price inflation published monthly by the Office of National Statistics. It is no longer the Government's preferred measure of inflation. As well as being based on different items and weightings to the Consumer Prices Index (CPI), it is also calculated using a different formula. However, it is the index that pension benefits have historically tended to be linked to and is the index used to determine increases in index-linked gilt coupons.

Schedule of contributions

Trustees of pension schemes must prepare and maintain a schedule of contributions. This shows the dates and amounts of contributions due from the sponsor and members. Under the Pensions Act 2004, the schedule must be put in place within 15 months of the valuation date.

Scaling factor

Differences in life expectancy between schemes are typically allowed for by multiplying the chance of dying at each age by a scaling factor. Scaling factors of less than 100% mean that people are assumed to live longer than under the standard tables. For example, a scaling factor of 90% means that a member has a 10% less chance of dying each year than is assumed in the standard mortality tables. Similarly, scaling factors of more than 100% mean that people are assumed to live for less time than under the standard tables.

Solvency estimate

This represents an estimate of the cost of buying out a scheme's benefits with an insurance company at the valuation date. Supply and demand factors also mean that no single solvency estimate can be relied on and so this estimate is unlikely to be the same as the actual cost of buying out the benefits. Assumptions are set by the Scheme Actuary.

Section 179 valuation

An actuarial valuation of a pension scheme in accordance with section 179 of the Pensions Act 2004. The Pension Protection Fund will take the results of a section 179 valuation into account when calculating a scheme's PPF levy.

Sponsor covenant

A sponsoring employer's 'covenant' is their legal obligation and financial ability to support the pension scheme, both now and in the future.

Solvency ratio

This is the ratio of the market value of a scheme's assets to the estimated cost of securing a scheme's liabilities in the event of the discontinuance of the scheme.

Statement of funding principles

The Pensions Act 2004 requires trustees to prepare (and from time to time review and, if necessary, revise) a written statement of their policy for securing that the statutory funding objective is met. This is referred to as a statement of funding principles.

Spot rate

A rate which is expected to apply between now and a future date. For example, to discount a single payment at a future date (say, five years from now) all the way back to time 0.

Surplus

This is the value of assets less the funding target. If the funding target is greater than the value of assets, then the difference is called a deficit.

Statutory funding objective

Under the Pensions Act 2004, every scheme is subject to the statutory funding objective, which is to have sufficient and appropriate assets to cover its technical provisions.

Technical provisions

This is the present value of the benefits members are entitled to, based on their pensionable service to the valuation date and assessed using the assumptions agreed between a scheme's trustees and the sponsor. It generally allows for projected future increases to pay through to retirement or date of leaving service.

Swap yield curve

The term-dependent yields on fixed-interest swaps derived by Aon from market data.

Withdrawal

Members may leave a pension scheme before their normal retirement age (typically because they leave employment with the sponsor). When they do so, their accrued benefits will no longer be linked to future salary increases (where applicable), and will instead be linked to future inflation. Benefits will still be payable at normal retirement age.

Transfer value

Members generally have a legal right to transfer their benefits to another pension arrangement before they retire. In taking a transfer, members give up their benefits in a scheme, and a sum of money (called the transfer value) is paid into another approved pension scheme; this is used to provide pension benefits on the terms offered in that scheme.

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