

### Northern Ireland Civil Service Pension Scheme Membership data

Actuarial valuation as at 31 March 2020

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23 October 2023

# **Highlights**

#### **NICSPS** valuation data



#### Key headlines

The quality of the NICSPS valuation data as at 31 March 2020 has slightly improved compared with the data used for the 2016 valuation.

Although the proportion of data that has been excluded has increased since 2016, fewer adjustments have been required to the membership data that has been used. In particular, the quality of the active valuation data used as at 31 March 2020 has improved materially.

#### Initial data quality

#### Data quality after checks and adjustments

**95.4%** Proportion of 'at 31 March 2020' records provided which we are able to use.

Deterioration vs. 95.7% in 2016

After making necessary adjustments detailed in this report, we conclude that the data is appropriate for the purpose of the 2020 NICSPS valuation. However, a different approach to adjusting data could still lead to different valuation results.

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#### Any terms that appear in this report in underlined text are defined in the Glossary.

At Government Actuary's Department (GAD), we seek to achieve a high standard in all our work. We are accredited under the Institute and Faculty of Actuaries' Quality Assurance Scheme. Our website describes <u>the</u> <u>standards</u> we apply.

## 1. Introduction

#### Who is this report for?

This report is addressed to the Northern Ireland Department of Finance (DoF NI).

The Public Service Pensions (Valuations and Employer Cost Cap) Directions (Northern Ireland) 2014 as amended ('the Directions') require the scheme actuary to provide information about the scheme and data. The purpose of this report is to provide the data we will be using and to help readers be confident that the results of the valuation are fit for purpose.

#### Why has the data been collected?

This data is needed to carry out an actuarial valuation of the Northern Ireland Civil Service Pension Scheme (NICSPS) as at 31 March 2020, in accordance with the Directions. This data will be used to set actuarial assumptions, and together the data and assumptions will be used to calculate valuation results.

### Why is the data important?

The results of the valuation are critically dependent on the quality of the data used. Poor data could lead to employers making different decisions due to paying too high or too low a contribution rate, or to benefit changes being made unnecessarily.

This data is often used for other important work as well, including the annual NICSPS accounting information.

### Results

### Assumptions

#### Data

Data is the first and most important building block of an actuarial valuation.

## 2. Data as at 31 March 2020

### Who provided the data?

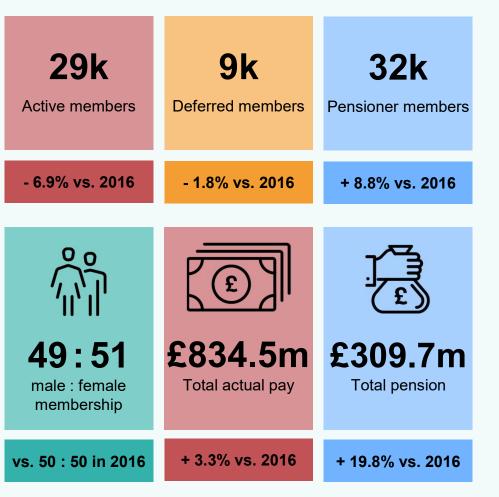
This data was wholly provided by the administrators of the NICSPS, Civil Service Pensions (CSP).

### What is the data used for?

It will be used to calculate the results of the 2020 NICSPS valuation, specifically:

- employer contribution rates due from 2024
- the cost cap cost of the scheme
- <u>actuarial liabilities</u> as at 31 March 2020.

Detailed data summaries are included in <u>Appendix A – Detailed</u> <u>summaries: data as at 31 March 2020</u>.



Pension amount includes the April 2020 pension increase

### 3. Movements data

#### Where did the data come from?

This movements data for 2016 to 2020 was wholly provided by CSP, the administrators of the NICSPS.

#### What is movements data used for?

We requested movements data in order to review existing assumptions about the scheme membership and propose new assumptions where appropriate. Agreed assumptions are then used to carry out valuation calculations.

#### **Membership reconciliation**

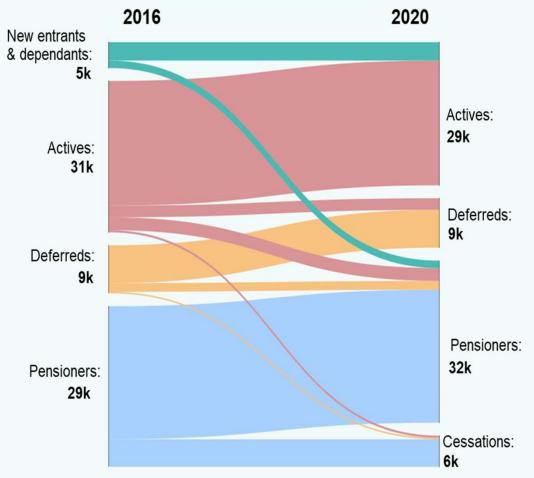
This movements data is used to perform a reconciliation which compares data as at 31 March 2016 and 31 March 2020 against movements occurring between this period to check that membership figures are in agreement.

#### Where can I find out more?

Detailed data summaries are included in <u>Appendix B –</u> <u>Detailed summaries: movements data</u>.

#### What does the chart show?

The chart below summarises movements between member categories from 2016 to 2020. The thicker the line, the greater the number of member movements occurring.



## 4. Checks and adjustments

### Why is this data checked?

We carry out checks to ensure this data is fit for purpose for the valuation. These checks also help us to understand and describe limitations on the valuation results due to data omissions. This is also a professional actuarial requirement.

### What checks are carried out?

We carry out checks on aggregated statistics produced from the data, and on a record by record basis. A simplified process diagram is shown to the right.

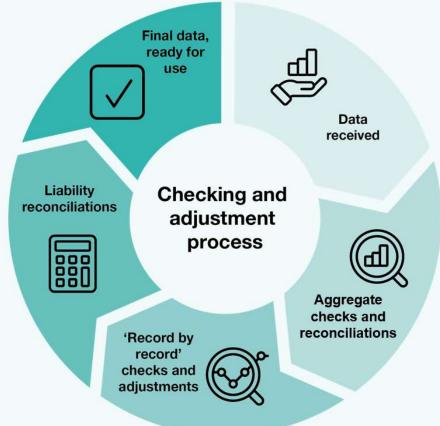
#### What happens to unreliable data?

Where our checks show that a data record seems to be unreliable, it is either excluded or adjusted. We do this to make sure the data is appropriate for calculating valuation results.

Where we exclude valid data records, we typically compensate for this by scaling up similar, included records.

### Where can I find out more?

A detailed summary of what we've done is contained in **Appendix C – Checks, adjustments and uncertainties**.



#### After checks & adjustments:

After finalising our checks and adjustments we will consider potential data improvements. We will engage with scheme managers on any issues we have identified to improve future data submissions, where possible and as appropriate.

## 5. Data quality

#### Who is responsible for data quality?

The Northern Ireland Department of Finance is responsible for ensuring appropriate data is provided in order to support the legislative requirement to perform a valuation.

It is the department's responsibility to ensure that data that is provided is in line with our specifications.

#### Was the data provided of good quality?

The percentage of data which was able to be used and not subject to exclusion is shown to the right. High percentages suggest good quality data.

Although the proportion of data that has been excluded has increased since 2016, fewer adjustments have been required to the membership data that has been used. In particular, the quality of the active valuation data used as at 31 March 2020 has improved materially.

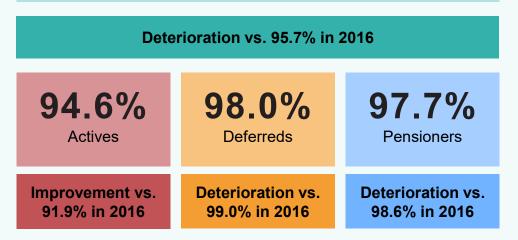
#### Can the data be used for the valuation?

Yes. After making the adjustments detailed in this report, we believe the data is appropriate for the purposes of the 2020 valuation.

Initial data quality

95.4%

Proportion of 'at 31 March 2020' records provided which we are able to use



#### Data quality after checks & adjustments



After making the necessary adjustments detailed in this report, we conclude that the data is appropriate for the purpose of the 2020 NICSPS valuation.

### 6. Impact of data limitations

### Do data limitations cause uncertainty?

Yes. Our checks and adjustments aim to ensure that the data is appropriate for use in valuation calculations. However, our checks do not constitute a full audit of the data and our adjustments, although reasonable in our view, may not mean that the dataset adopted accurately reflects the true data of the scheme. This means that there is residual data uncertainty.

### Is data uncertainty a significant issue?

Residual data uncertainty can potentially have an impact on valuation results, including for example on the <u>cost cap cost</u> of the scheme and any resulting impact on member benefits.

However, in large and complex data sets this uncertainty is normal and is not usually a cause for concern.

In our view, the residual uncertainty present in this data is not significant enough to dissuade users from taking actions recommended from this valuation.

#### Where can I find out more?

A more detailed summary of residual data uncertainty is set out in <u>Appendix C – Checks, adjustments and uncertainty</u>.



## 7. Limitations

#### Data

In preparing this report, GAD has relied on data and other information supplied by Northern Ireland Department of Finance as described in the report. GAD has not sought independent verification around its general completeness and accuracy (beyond our comparisons with the relevant Resource Accounts).

Any checks that GAD has made are limited to those described in the report, including those relating to the overall reasonableness and consistency of the data. These checks do not represent a full independent audit of the data supplied.

Throughout this report, the totals given for summed data may not be exactly the same as the sum of the components shown due to rounding effects.

#### **DoF NI Directions**

Throughout this report, in any place where we indicate the potential variability of valuation results - these take into account DoF NI <u>Directions</u> for the 2020 valuations.

### Sharing

This report has been prepared for the use of DoF NI. This report will be published as part of completing the 2020 valuation of the scheme, and we are content for DoF NI to release this report to third parties, provided:

- It is released in full;
- The advice is not quoted selectively or partially;
- GAD is identified as the source of the report, and;
- GAD is notified of such release.

Other than DoF NI, no person or third party is entitled to place any reliance on the contents of this report, except to any extent explicitly stated herein. GAD has no liability to any person or third party for any action taken or for any failure to act, either in whole or in part, on the basis of this report.

#### **Compliance statement:**

This report has been prepared in accordance with the applicable Technical Actuarial Standards: TAS 100 and TAS 300 issued by the Financial Reporting Council (FRC). The FRC sets technical standards for actuarial work in the UK.

### Appendix A

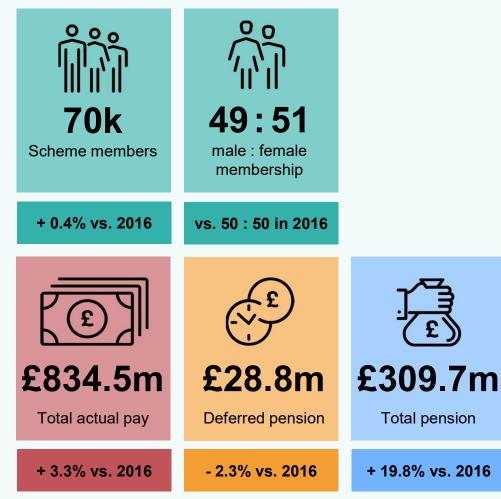
### Detailed summaries: Data as at 31 March 2020



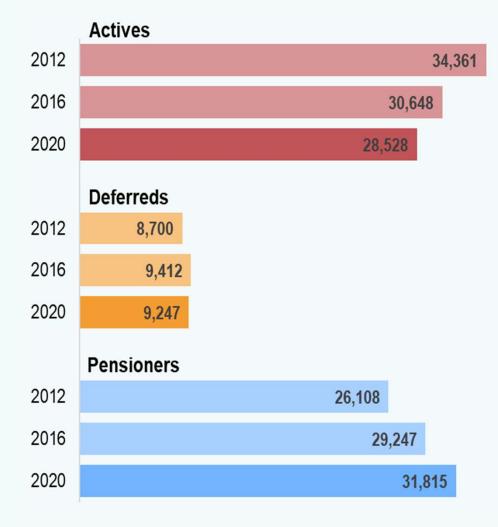
### Scheme data

As at 31 March 2020

#### **Summary statistics**



#### Membership over time



Pension amount includes the April 2020 pension increase

## Scheme membership

As at 31 March 2020

There are a similar number of female and male members.

The overall population across all categories generally increases with age up to around age 60 (albeit there is a trough in the early to mid 40s).

Pensioner/dependant numbers begin increasing from around age 50 and peak between ages 65 and 75.

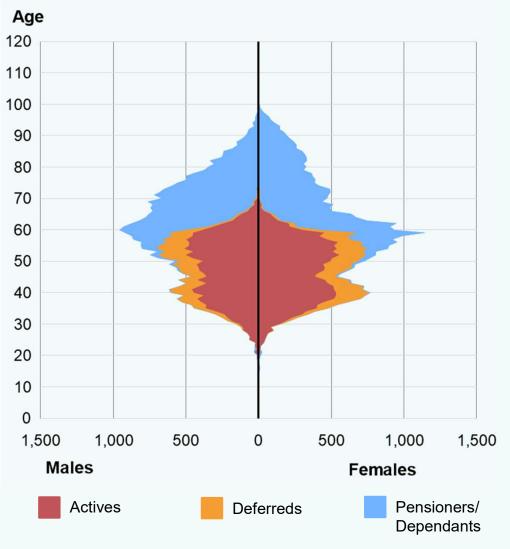
This corresponds with generally declining numbers of active members and deferred members from around age 55.

Some deferred members have still not claimed their pensions, despite being over <u>normal pension age.</u>

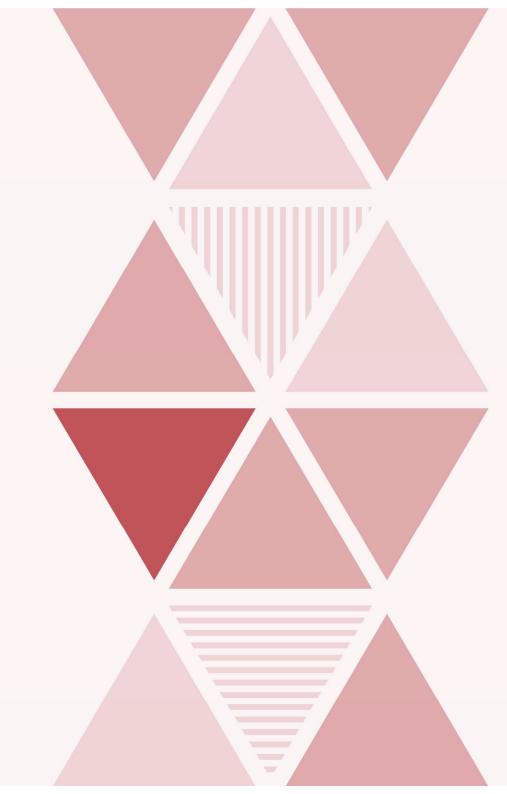
#### Where can I see more?

Appendix D – Tables of summary statistics

#### Membership distribution



### Actives



### **Actives data**

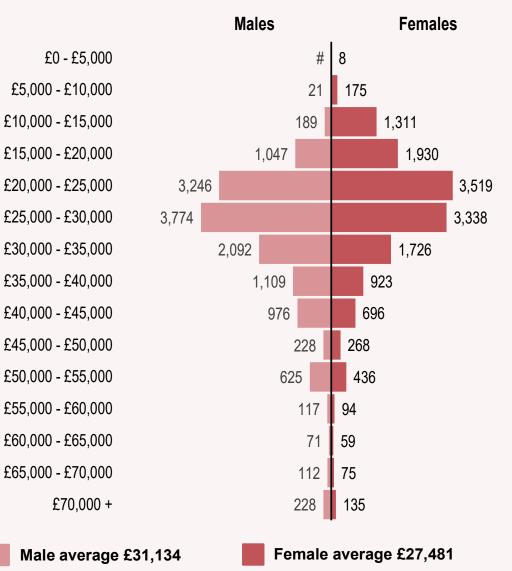
As at 31 March 2020

#### **Summary statistics**



Pension amount does not include the April 2020 pension revaluation \*Average is only for members who have post-reform <u>CARE</u> pension and is not adjusted for <u>McCloud</u>

### Actual pay distribution



#Not shown to avoid disclosing information on single individuals but is included in the average

As at 31 March 2020

There are generally slightly more female members.

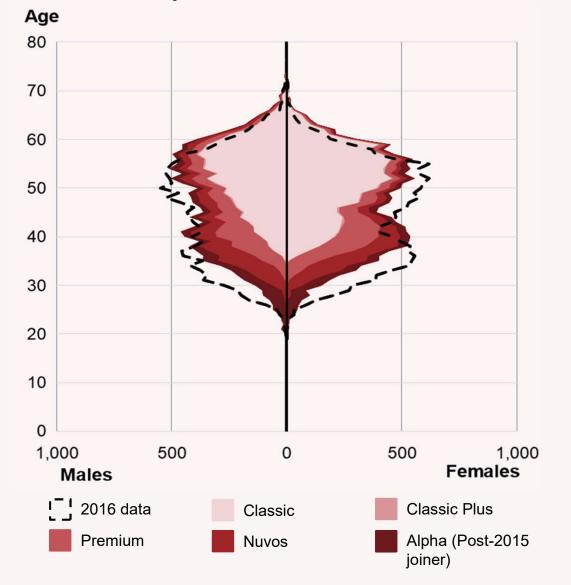
The majority of active members are in one of the <u>legacy</u> <u>sections</u> (shown by the lighter shades). Please refer to page 33 for an explanation of how members have been categorised by <u>section</u>.

Over time, the numbers in these sections should fall as members retire and are replaced by members with only service in the Alpha section. All active members transitioned to Alpha for service from 1 April 2022.

There are some fluctuations in active membership numbers by age, but overall the 2020 active membership has reduced slightly and aged compared with 2016. This reflects a gradual maturing of the NICSPS over recent valuations.

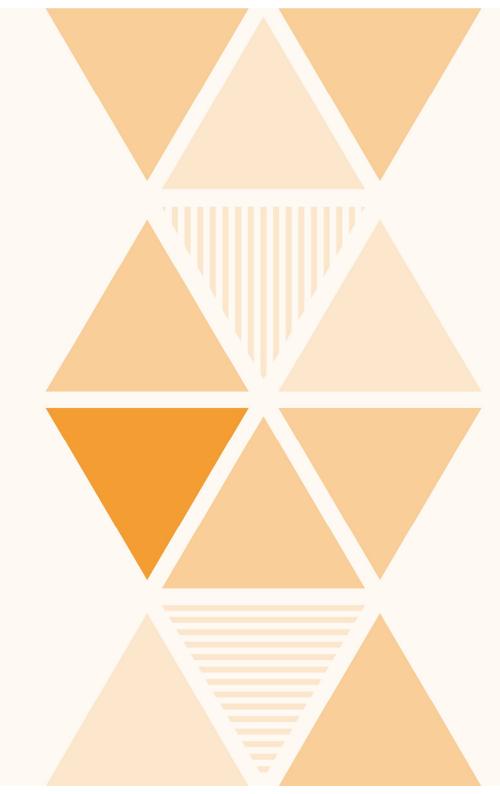
Where can I see more?

Appendix D – Tables of summary statistics



#### Membership distribution

### Deferreds



### **Deferreds data**

As at 31 March 2020

#### **Summary statistics**

#### 000 46:54 £28.8m **9**k **Total deferred Deferred members** male : female membership pension - 1.8% vs. 2016 vs. 46 : 54 in 2016 - 2.3% vs. 2016 Age £3,111 49.8 yrs Average age Average pension (weighted by pension)

- 0.5% vs. 2016

#### **Deferred pension distribution**



Pension amount includes the April 2020 pension increase

+0.2 yrs vs. 2016

## **Deferred membership**

As at 31 March 2020

There are generally slightly more female members.

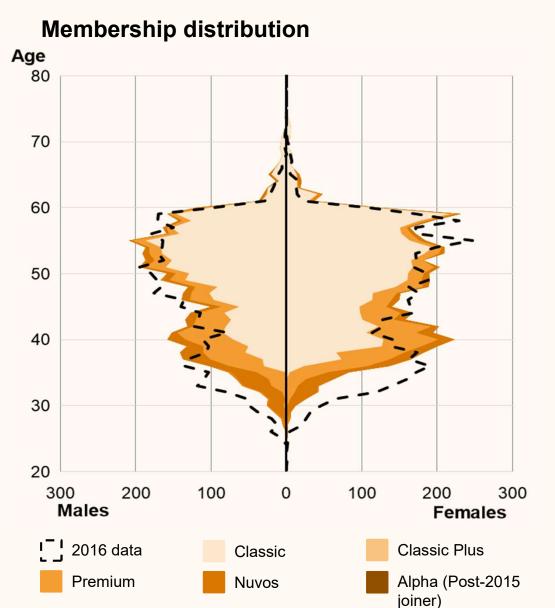
The majority of deferred members are in one of the <u>legacy</u> <u>sections</u> (shown by the lighter shades). Please refer to page 33 for an explanation of how members have been categorised by section.

There are deferred members over <u>normal pension age</u> who have not yet claimed the pension they are entitled to.

There are some fluctuations in deferred membership numbers by age, but overall the 2020 active membership has reduced slightly and aged compared with 2016. This reflects a gradual maturing of the NICSPS over recent valuations.

Where can I see more?

Appendix D – Tables of summary statistics



### Pensioners

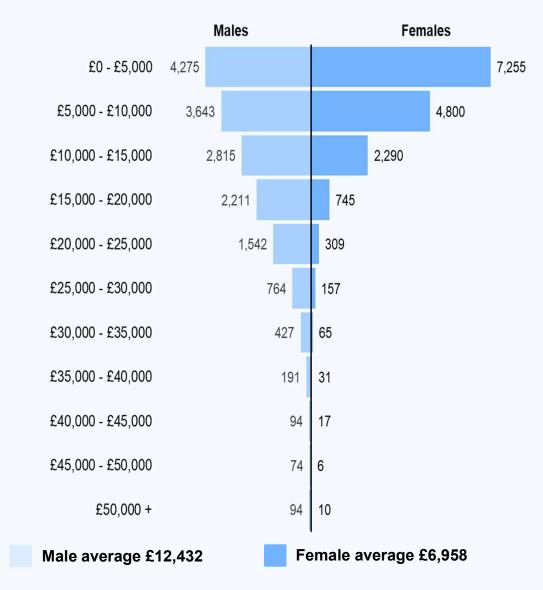


### **Pensioner data**

As at 31 March 2020

#### Summary statistics 000 51:49 **5**k 27k Dependants male : female Pensioners membership (retired members) + 10.2% vs. 2016 + 2.1% vs. 2016 vs. 53 : 47 in 2016 Age £9,734 70.3 yrs £309.7m **Total pension** Average pension Average age (weighted by pension) + 19.7% vs. 2016 + 10.1% vs. 2016 +1.3 yrs vs. 2016

#### Pensioner data pension distribution



Pension amount includes the April 2020 pension increase

### **Pensioner membership**

As at 31 March 2020

There are generally more male pensioners, and more female dependants across all ages.

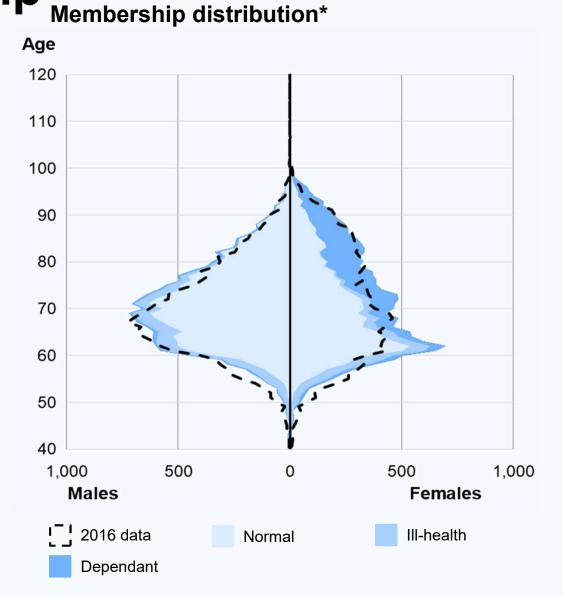
The majority of pensioners are those who retired in normal health (shown by the lightest shade).

There are also members who retired in ill-health and dependants (including children). We anticipate carrying out a combined (normal and ill-health) analysis for mortality as around half of the normal health and ill-health pensioner records have been classified based on age at date pension commenced and the other half based on historical classifications which have sometimes been unreliable.

Overall, compared with 2016 (shown by the dotted black line) the pensioner population has aged slightly. This reflects a gradual maturing of the NICSPS over recent valuations.

Where can I see more?

Appendix D – Tables of summary statistics



\*This chart does not show members aged below 40 years.

# **Appendix B**

### **Detailed summaries: Movements data**



# **Membership movements 1**

31 March 2016 to 31 March 2020

#### Actives

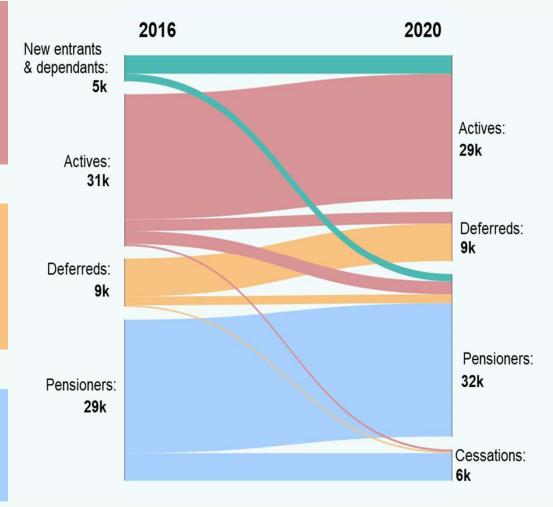
Active membership numbers as at 2020 are very similar to those as at 2016, with the number of new entrants being slightly lower than the number who have withdrawn, retired or died.

#### Deferreds

The movement between active and deferred status is shown on a net movements basis, that is the number of members moving from active to deferred status less the number of deferred members returning to employment.

#### Pensioners

Reasons for cessation from pensioner status include pensioner deaths and members no longer being eligible for a pension from the NICSPS – for example, child pensions ceasing at a certain age or on leaving education.



# Membership movements 2

31 March 2016 to 31 March 2020

This table shows how the number of members in each category has changed over the period 31 March 2016 (top row) to 31 March 2020 (bottom row).

The intermediate rows summarise the membership movements provided over the period, as illustrated on the previous page.

#### Reconciliation

The expected number of members in each category at 31 March 2020 is set out in the penultimate row of the table. This reflects the starting position at 31 March 2016 and the movements data provided.

There are a number of minor differentials between this expected position and the actual position at 31 March 2020.

- Actives: c540 members
- Deferreds: c30 members
- Pensioners: c330 members.

These differences are within our tolerance levels for a scheme of this size, so no further action needs to be taken.

Figures in intermediate rows are rounded to the nearest 10	Actives	Deferreds	Pensioners
Number at start of period:	30,648	9,412	29,247
New members:			
New entrants	3,540	-	-
New dependants	-	-	1,430
Movements between categories:			
Leavers from active service	-2,230	1,770	-
Re-joiners and re-employed	-	-	-
Retirements	-2,470	-1,680	5,410
Cessations with no ongoing liability:			
Member deaths	-100	-60	-2,820
Dependant deaths	-	-	-1,210
Other exits	-260	-220	-570
Movement adjustment*	-50	-	-
Number expected at end of period:	29,070	9,220	31,480
Valuation data at end of period:	28,528	9,247	31,815
Difference:	-540	30	330

\*members present in 2016 valuation data but not in the movement data and excluded from the 2020 valuation data as recorded as having no liability.

Individual numbers may not sum to total due to rounding.

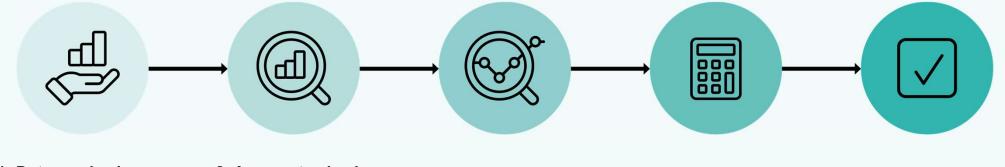
### **Appendix C**

Checks, adjustments and uncertainties



### Membership data Appendix C

### **Checking and adjustment process**



#### 1. Data received

Our work starts when schemes provide data. This is collated and processed to remove any unnecessary personal information and to encrypt any personal information that needs to be retained.

All member data provided and discussed in this report was supplied to GAD directly by the pension scheme administrator.

### 2. Aggregate checks and reconciliations

Initial checks carried out on the data are at an overall level, as opposed to an individual record basis.

Any unexpected changes compared to previous datasets are identified.

The data provided is then reconciled against that from a separate source (e.g. scheme resource accounts) to check for any potential issues.

# 3. 'Record by record' checks and adjustments

If the data passes our initial checks, we then undertake a series of automated, record-byrecord checks to remove records that are deemed unreliable. For example, duplicate records, or those with missing key data. Where valid individual records are excluded. remaining records with similar characteristics are typically rated up to compensate for this, where appropriate.

4. Liability reconciliation

At the final checking stage, we use the adjusted data to calculate <u>actuarial</u> <u>liabilities</u> and reconcile them against those calculated in 2016, adjusted for cashflow information. 5. Final data, ready for use

After completion of checks and adjustments, the dataset is ready for calculating valuation results. We then decide whether, in our opinion, it is fit for the purpose of making decisions based on the valuation results.

If we notice significant issues at any stage of our checking process, we request new or additional data from the scheme administrator in order to correct or allow for them.

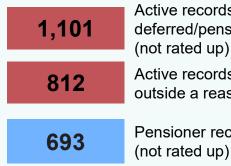
#### **Process, limitations & uncertainty**

We exclude individual records that have missing or unreliable key data and <u>rate up</u> similar remaining records to replace them, where appropriate.

This process assumes that the membership profile of excluded records is consistent with the profile of the similar reliable records. However, to the extent that this is not the case, there is a degree of uncertainty in the valuation results. Further details are set out in the section of this appendix titled 'Residual Data uncertainty'.

Overall, we believe this is a reasonable approach to take given the scarcity of alternative information.

#### Top 3 reasons for excluding records\*



Active records identified by administrator as deferred/pensioner, or having no liability (not rated up)

Active records with post-2015 pension outside a reasonable range (rated up)

Pensioner record zero pension (not rated up)

\* Some members may fail more than one exclusion check. Only one exclusion will apply in such cases. As a result, the total number of members failing a check can exceed the number of exclusions.

### Summary of excluded records

1,598	172	763
Actives excluded	Deferreds excluded	Pensioners excluded
5.4%	2.0%	2.3%
of total records	of total records	of total records
Improvement vs. the 8.1% 2016 exclusion	Deterioration vs. the 1.0% 2016 exclusion	Deterioration vs. the 1.4% 2016 exclusion

Overall 4.6% of total records were excluded (a deterioration compared with the 4.3% excluded in 2016).

#### **Further information**

After finalising our checks and adjustments we will consider potential data improvements. We will engage with scheme managers on any issues we have identified to improve future data submissions, where possible and as appropriate.

## Liability reconciliation

#### **Summarised results**

At the final data checking stage we carry out the following reconciliation.

#### **Reconciliation against 2016 valuation results**

This step assesses the expected versus calculated value of the scheme's <u>actuarial liability</u> as at 31 March 2020. The expected liability is calculated by adjusting the 2016 liabilities for cashflow information from the scheme's resource accounts, allowing for known pension increases and salary awards since 2016. Differences between expected and calculated liabilities could imply missing or incorrect data.



This check is within our tolerance levels.

#### **Tolerance levels and uncertainty**

All reconciliations have a tolerance level, within which we accept any differences and move on. Our tolerance levels vary between checks, depending on the level of accuracy we believe appropriate.

If differences fall outside of the acceptable tolerance levels, further investigations are carried out before deciding whether to accept, adjust, or reject the data provided.

#### Limitations

The results of these checks are heavily dependent on the accuracy and completeness of the information contained in the scheme's published resource accounts as at 31 March 2017, 2018, 2019 and 2020.

If any of this information is materially inaccurate the results of our checks will also be inaccurate. We believe this is a low risk, as the scheme's accounts have been audited.

## **Residual data uncertainty**

### Summary

The previous sections of this appendix have described the checks and adjustments made to the data to ensure it is fit for the purpose of calculating valuation results.

However, there are risks that the adjustments we have made do not truly represent the underlying data of the scheme, or that the data provided did not truly represent the underlying data of the scheme and we have not made the necessary adjustments to ensure that it does.

#### Potential impact on valuation results

We are comfortable that the checks and adjustments that have been made are reasonable and that the data is appropriate for the purpose of the 2020 valuation. In our opinion, the potential impact of data uncertainty on the employer contribution rate and member outcomes (via the cost control mechanism) is:

- Employer contribution rate: The uncertainty will be captured together with other experience and changes through the 2024 (or subsequent) valuations and may have an impact of the order of ±0.25% of pensionable pay.
- Member outcomes: No impact expected

After making necessary adjustments detailed in this report, we conclude that the data is appropriate for the purpose of the 2020 NICSPS valuation.

#### Summary

In addition, we sometimes make adjustments to data provided to correct known data issues.

We only do this when requested, and when it is more efficient for us to make simple changes than to request new data from administrators.

The key adjustments we have made for NICSPS are detailed below.

#### Actives:

- Full time equivalent (FTE) pay appeared to have been provided as weekly amounts for around 900 members. Therefore FTE pay was annualised if FTE pay was less than £1,000 in the data.
- Actual pay was calculated from FTE pay and a member's part time proportion rather than actual pay fields for approximately 28,000 members.
- When determining the transitional protection status of a member (relating to the <u>McCloud</u> judgment) – this was based on age at 2012, date joined scheme and the presence of Alpha pension rather than on the raw status field, for around 6,400 members.

#### **Deferreds:**

- A <u>rate up</u> of approximately 8% was applied to account for around 680 members in the 2020 actives dataset that were subsequently identified as deferred members.
- Deferred pensions were provided at date of leaving and we revalued these to the valuation date.
- Members have been assigned a section based on their <u>legacy section</u> at date of leaving (where appropriate).

#### Pensioners:

- Approximately 15,250 records were assigned to illhealth or normal health status depending on age at date pension commenced.
- For around 240 normal health pensioners under age 55 their pension was revalued to the valuation date.

#### Limitations and uncertainty

The extent to which the true data differs from the adjusted data we use in our calculations creates a degree of uncertainty in the valuation results. More details are set out in the section of this appendix titled 'residual data uncertainty'.

## **Appendix D**

Tables of summary statistics



### **Summary statistics – introduction**

#### Categorisation

The membership data in this appendix is categorised by <u>section</u>. Where applicable, members are assigned to the <u>legacy section</u> that they have already accrued benefits in, even if they have now started to accrue benefits in the <u>reformed section</u>. This means that:

- Members who have legacy benefits only as at 31 March 2020 will be categorised under their respective <u>legacy</u> <u>section</u>.
- Members who have a combination of legacy and reformed benefits as at 31 March 2020 having transitioned from a legacy to reformed scheme will be categorised under their respective <u>legacy section</u>.
- Members who have reformed benefits only as at 31 March 2020 will be categorised under the <u>reformed section</u>.

Note that all active members will accrue benefits in Alpha from 1 April 2022.

### Interpretation

The rest of this appendix summarises the NICSPS data, after adjustments, into a series of tables. An example is shown below.

The first number in each section of the table, in bold text, shows data as at 31 March 2020. The second number, in standard text, shows the change from data as at 31 March 2016 to data as at 31 March 2020.

Positive changes show increases between 2016 and 2020 and negative changes show decreases.

#### **Example table**

Section	Males	Females	Total
Legacy section 1	<b>100</b>	<b>100</b>	<b>200</b>
	+10	+10	+20
Legacy section 2	<b>100</b>	<b>100</b>	<b>200</b>
	+10	+10	+20
Reformed section	<b>100</b>	<b>100</b>	<b>200</b>
	+10	+10	+20
All sections	<b>300</b>	<b>300</b>	<b>600</b>
	+30	+30	+60

As at 31 March 2020

#### Number of members

Section	Males	Females	Total
Classic	<b>6,649</b>	<b>8,070</b>	<b>14,719</b>
	- 1,140	- 1,368	- 2,508
Classic Plus	<b>145</b>	<b>157</b>	<b>302</b>
	- 4	- 48	- 52
Premium	<b>2,653</b>	<b>2,680</b>	<b>5,333</b>
	- 696	- 988	- 1,684
Nuvos	<b>2,641</b>	<b>2,246</b>	<b>4,887</b>
	- 520	- 327	- 847
Alpha (Post-2015 joiner)	<b>1,746</b>	<b>1,541</b>	<b>3,287</b>
	+ 1,577	+ 1,394	+ 2,971
All sections	<b>13,835</b>	<b>14,693</b>	<b>28,528</b>
	- 782	- 1,338	- 2,120

#### Average age\* (years)

Section	Males	Females	Total
Classic	<b>52.9</b>	<b>51.5</b>	<b>52.2</b>
	+ 2.7	+ 2.8	+ 2.7
Classic Plus	<b>52.1</b>	<b>49.7</b>	<b>51.0</b>
	+ 2.2	- 0.8	+ 0.8
Premium	<b>45.5</b>	<b>43.5</b>	<b>44.6</b>
	+ 1.8	+ 1.5	+ 1.7
Nuvos	<b>42.1</b>	<b>40.1</b>	<b>41.2</b>
	+ 3.6	+ 3.7	+ 3.7
Alpha (Post-2015 joiner)	<b>39.0</b>	<b>38.3</b>	<b>38.7</b>
	- 0.4	- 3.5	- 1.9
All sections	<b>47.9</b>	<b>46.7</b>	<b>47.3</b>
	+ 1.4	+ 1.5	+ 1.4

\* weighted by actual pay

As at 31 March 2020

### Total full-time equivalent pay (£m pa)

#### Total actual pay (£m pa)

Section	Males	Females	Total	Section	Males	Females	Total
Classic	<b>225</b> - 8.9%	<b>244</b> - 6.5%	<b>469</b> - 7.7%	Classic	<b>217</b> - 10.3%	<b>214</b> - 9.7%	<b>432</b> - 10.0%
Classic Plus	<b>5</b> + 4.4%	<b>5</b> - 7.9%	<b>10</b> - 2.2%	Classic Plus	<b>5</b> + 15.0%	<b>5</b> + 2.1%	<b>9</b> + 8.4%
Premium	<b>82</b> - 12.0%	<b>84</b> - 16.5%	<b>166</b> - 14.3%	Premium	<b>81</b> - 5.3%	<b>75</b> - 13.1%	<b>156</b> - 9.2%
Nuvos	<b>79</b> -0.7%	<b>71</b> +5.1%	<b>150</b> +2.0%	Nuvos	<b>78</b> + 0.9%	<b>65</b> + 3.1%	<b>143</b> + 1.9%
Alpha (Post-2015 joiner)	<b>50</b> > +1000%	<b>47</b> > +1000%	<b>97</b> > +1000%	Alpha (Post-2015 joiner)	<b>49</b> > +1000%	<b>45</b> > +1000%	<b>94</b> > +1000%
All sections	<b>441</b> +2.8%	<b>451</b> +2.9%	<b>892</b> +2.8%	All sections	<b>431</b> + 4.2%	<b>404</b> + 2.5%	<b>835</b> + 3.3%

As at 31 March 2020

#### Average full-time equivalent pay (£ pa)

Section	Males	Females	Total
Classic	<b>33,820</b>	<b>30,207</b>	<b>31,839</b>
	+ 6.7%	+ 9.3%	+ 8.1%
Classic Plus	<b>33,937</b>	<b>32,032</b>	<b>32,949</b>
	+ 6.7%	+ 20.8%	+ 14.6%
Premium	<b>30,984</b>	<b>31,396</b>	<b>31,191</b>
	+ 11.1%	+ 14.3%	+ 12.7%
Nuvos	<b>30,038</b>	<b>31,544</b>	<b>30,730</b>
	+18.8%	+20.4%	+19.6%
Alpha (Post-2015 joiner)	<b>28,476</b>	<b>30,798</b>	<b>29,564</b>
	+11.7%	+13.1%	+12.4%
All sections	<b>31,881</b>	<b>30,710</b>	<b>31,278</b>
	+ 8.6%	+ 12.3%	+ 10.5%

#### Average actual pay (£ pa)

Section	Males	Females	Total
Classic	<b>32,703</b>	<b>26,570</b>	<b>29,341</b>
	+ 5.1%	+ 5.6%	+ 5.3%
Classic Plus	<b>33,408</b>	<b>28,740</b>	<b>30,987</b>
	+ 17.6%	+ 33.9%	+ 27.1%
Premium	<b>30,521</b>	<b>27,834</b>	<b>29,171</b>
	+ 19.6%	+ 18.9%	+ 19.5%
Nuvos	<b>29,672</b>	<b>28,925</b>	<b>29,329</b>
	+ 20.7%	+ 18.1%	+ 19.5%
Alpha (Post-2015 joiner)	<b>28,113</b>	<b>29,405</b>	<b>28,719</b>
	+ 33.1%	+ 30.7%	+ 32.0%
All sections	<b>31,134</b>	<b>27,481</b>	<b>29,253</b>
	+ 10.1%	+ 11.8%	+ 11.0%

As at 31 March 2020

#### Average reckonable service (years)\*

Section	Males	Females	Total
Classic	<b>23.2</b>	<b>20.5</b>	<b>21.7</b>
	- 1.2	- 1.5	- 1.4
Classic Plus	<b>22.1</b>	<b>18.0</b>	<b>20.0</b>
	+ 7.1	+ 6.9	+ 7.2
Premium	<b>11.4</b>	<b>10.5</b>	<b>11.0</b>
	+ 1.9	+ 2.0	+ 2.0
Nuvos	-	-	-
Alpha (Post-2015 joiner)	-	-	-
All sections	<b>19.9</b>	<b>18.0</b>	<b>18.9</b>
	+ 0.0	- 0.1	- 0.1

\*Unweighted (shown for final salary sections only)

#### Total post-reform <u>CARE</u> pension (£ m)

Section	Males	Females	Total
Classic	<b>15,329</b>	<b>17,031</b>	<b>32,361</b>
	+ 481.8%	+ 467.7%	+ 474.3%
Classic Plus	<b>348</b>	<b>392</b>	<b>741</b>
	+ 532.9%	+ 727.6%	+ 623.0%
Premium	<b>7,782</b>	<b>7,577</b>	<b>15,359</b>
	+ 447.3%	+ 412.4%	+ 429.5%
Nuvos	<b>8,196</b>	<b>6,914</b>	<b>15,110</b>
	+ 466.1%	+ 462.5%	+ 464.5%
Alpha (Post-2015 joiner)	<b>2,196</b> > +1000%	<b>2,125</b> > +1000%	<b>4,321</b> > +1000%
All sections	<b>33,851</b>	<b>34,040</b>	<b>67,891</b>
	+ 503.1%	+ 486.8%	+ 494.8%

Pension amount does not include the April 2020 pension revaluation

### Summary statistics – deferreds 1

As at 31 March 2020

#### Number of members

Section	Males	Females	Total
Classic	<b>2,840</b>	<b>3,483</b>	<b>6,323</b>
	- 405	- 378	- 783
Classic Plus	#	#	#
	#	#	#
Premium	<b>883</b>	<b>1,020</b>	<b>1,903</b>
	+ 108	+ 114	+ 222
Nuvos	<b>499</b>	<b>448</b>	<b>948</b>
	+ 184	+ 139	+ 324
Alpha (Post-2015 joiner)	<b>41</b>	<b>31</b>	<b>72</b>
	+ 41	+ 31	+ 72
All sections <sup>#</sup>	<b>4,263</b>	<b>4,984</b>	<b>9,247</b>
	- 72	- 93	- 165

#### Average age\* (years)

Section	Males	Females	Total
Classic	<b>52.8</b>	<b>52.0</b>	<b>52.4</b>
	+ 0.5	+ 1.1	+ 0.8
Classic Plus	#	#	#
	#	#	#
Premium	<b>45.4</b>	<b>45.2</b>	<b>45.3</b>
	+ 0.8	+ 2.9	+ 1.9
Nuvos	<b>42.3</b>	<b>41.7</b>	<b>42.0</b>
	+ 2.5	+ 2.0	+ 2.3
Alpha (Post-2015 joiner)	37.0	43.0	39.6
	-	-	-
All sections <sup>#</sup>	<b>50.0</b>	<b>49.6</b>	<b>49.8</b>
	- 0.4	+ 0.8	+ 0.2

\* weighted by pension

### Summary statistics – deferreds 2

As at 31 March 2020

#### Total deferred pension (£000's pa)

Section	Males	Females	Total
Classic	<b>9,473</b>	<b>10,366</b>	<b>19,839</b>
	- 19.6%	- 8.7%	- 14.3%
Classic Plus	#	#	#
	#	#	#
Premium	<b>2,718</b>	<b>3,006</b>	<b>5,724</b>
	+ 23.5%	+ 28.7%	+ 26.2%
Nuvos	<b>1,696</b>	<b>1,367</b>	<b>3,063</b>
	+ 93.4%	+ 57.2%	+ 75.4%
Alpha (Post-2015 joiner)	79	61	140
	-	-	-
All sections <sup>#</sup>	<b>13,967</b>	<b>14,801</b>	<b>28,768</b>
	- 6.1%	+ 1.6%	- 2.3%

Pension amount includes the April 2020 pension increase

### Average deferred pension (£ pa)

Section	Males	Females	Total
Classic	<b>3,336</b>	<b>2,976</b>	<b>3,138</b>
	- 8.2%	+ 1.1%	- 3.7%
Classic Plus	#	#	#
	#	#	#
Premium	<b>3,079</b>	<b>2,947</b>	<b>3,008</b>
	+ 8.4%	+ 14.3%	+ 11.5%
Nuvos	<b>3,396</b>	<b>3,050</b>	<b>3,232</b>
	+ 22.0%	+ 8.3%	+ 15.5%
Alpha (Post-2015 joiner)	1,931	1,952	1,940
	-	-	-
All sections <sup>#</sup>	<b>3,276</b>	<b>2,970</b>	<b>3,111</b>
	- 4.5%	+ 3.5%	- 0.5%

#Not shown for Classic Plus to avoid disclosing information on single individuals but is included in All sections

## Summary statistics – pensioners 1

As at 31 March 2020

#### Number of members

Туре	Males	Females	Total
Normal	<b>13,351</b>	<b>9,180</b>	<b>22,531</b>
	+ 1,723	+ 2,519	+ 4,242
III-health	<b>2,142</b>	<b>1,833</b>	<b>3,975</b>
	- 1,196	- 587	- 1,783
Dependant	<b>637</b>	<b>4,671</b>	<b>5,309</b>
	+ 87	+ 21	+ 109
All sections	<b>16,131</b>	<b>15,684</b>	<b>31,815</b>
	+ 615	+ 1,953	+ 2,568

#### Average age\* (years)

Туре	Males	Females	Total
Normal	<b>71.7</b>	<b>69.2</b>	<b>71.0</b>
	+ 1.7	+ 0.8	+ 1.4
III-health	<b>63.2</b>	<b>60.7</b>	<b>62.2</b>
	- 2.0	- 2.0	- 2.2
Dependant	<b>60.0</b>	<b>76.4</b>	<b>75.3</b>
	+ 2.9	+ 0.7	+ 0.7
All sections	<b>70.7</b>	<b>69.5</b>	<b>70.3</b>
	+ 1.6	+ 0.5	+ 1.3

\* weighted by pension

## Summary statistics – pensioners 2

As at 31 March 2020

#### Total pension (£m pa)

Туре	Males	Females	Total
Normal	<b>176</b>	<b>69</b>	<b>245</b>
	+ 22.2%	+ 51.8%	+ 29.3%
III-health	<b>23</b>	<b>16</b>	<b>39</b>
	- 25.2%	- 8.0%	- 19.0%
Dependant	<b>2</b>	<b>24</b>	<b>26</b>
	+ 45.8%	+ 20.6%	+ 22.0%
All sections	<b>201</b>	<b>109</b>	<b>310</b>
	+ 14.1%	+ 31.7%	+ 19.7%

Pension amount includes the April 2020 pension increase

#### Average pension (£ pa)

Туре	Males	Females	Total
Normal	<b>13,172</b>	<b>7,500</b>	<b>10,861</b>
	+ 6.4%	+ 10.1%	+ 4.9%
III-health	<b>10,705</b>	<b>8,616</b>	<b>9,742</b>
	+ 16.6%	+ 21.4%	+ 17.3%
Dependant	<b>2,753</b>	<b>5,245</b>	<b>4,945</b>
	+ 25.8%	+ 20.0%	+ 19.5%
All sections	<b>12,432</b>	<b>6,958</b>	<b>9,734</b>
	+ 9.7%	+ 15.3%	+ 10.1%

# Appendix E



Actuarial liability	The monetary amount assessed, in today's terms, as being required to meet all future payments due in respect of current benefit entitlements. It is dependent on assumptions about future financial conditions and membership changes.
CARE	CARE stands for Career Average Revalued Earnings and refers to a methodology whereby earnings over a member's working lifetime in the scheme are used in the calculation of their benefits in the reformed scheme (this applies to Alpha and Nuvos in the NICSPS).
	A way of measuring the cost of benefits being provided from the Alpha section of the scheme, which is then compared to a 'target cost'. The NICSPS target cost is set at 18.3% of pay.
Cost cap cost	If the results of the valuation show that the cost cap cost is more than 3% of pensionable pay away from the target cost, and the cost of the scheme still results in a breach once the impact of the economic check is taken into account, changes must be made to the Alpha section (e.g. to the benefits provided) to bring the cost cap cost back to the target cost.
Directions	A document published by Northern Ireland Department of Finance (DoF NI) and referred to in The Public Service Pensions Act (Northern Ireland) 2014, which sets out the process and requirements for carrying out valuations, including the results which need to be disclosed. Directions were first published in 2014 and have been updated several times since then.
Employer contribution rates	<ul> <li>The percentage of scheme members' salaries which employers are required to pay in order to:</li> <li>meet the costs of benefits currently being built up by active members</li> <li>make good any shortfall in the notional amounts set aside to cover benefits already built up.</li> <li>The result is heavily dependent on assumptions about future financial conditions and membership changes.</li> </ul>
McCloud	McCloud refers to a legal judgment made in December 2018. The England and Wales Court of Appeal judgment upheld claims of age discrimination brought by some firefighters and members of the judiciary against 'transitional protection' rules. These rules determined the date on which some members would move between <u>reformed and legacy sections</u> of the scheme.

Normal pension age	<ul> <li>The age at which a member in normal health is entitled to unreduced benefits. This age varies in different scheme sections:</li> <li>Age 60 for the legacy scheme benefits (Classic, Classic Plus and Premium)</li> <li>Age 65 for the legacy scheme benefits (Nuvos)</li> <li>State Pension Age (SPA) (ie currently ages 65 to 68 depending on date of birth) for the reformed scheme benefits (Alpha).</li> </ul>	
Pension increase	Public service pensions are increased under the provisions of the Pensions (Increase) Act (Northern Ireland) 1971 and Section 59 of the Social Security Pensions (Northern Ireland) Order 1975.	
Pension revaluation	The rate at which the CARE pension is revalued each year a member is an active member.	
	The professional requirements that we have complied with when completing this actuarial valuation include:	
Professional actuarial requirements	1. Technical Actuarial Standards: TAS 100 and TAS 300, issued by the FRC	
	2. The Actuaries' Code, issued by the Institute and Faculty of Actuaries (IFoA)	
	3. The Civil Service Code.	
	GAD is also accredited under the IFoA's Quality Assurance Scheme. More details can be found in our terms of reference.	

Rate up	A term used to refer to any multiplicative adjustments made to data in order to correct for known issues. For example, if it appears that a group of members have been omitted from the data we've received and salaries are understated by 2% as a result, we might apply a 'rate up' of 2% to the salary data we actually hold as a correction. Although the term 'rate up' implies an increase, we might also 'rate down' if appropriate to do so.
Reformed and legacy sections	The reformed section of the scheme is the section that was set up in line with The Public Service Pensions Act (Northern Ireland) 2014, and which came into force on 1 April 2015 (referred to as the Alpha section in this report). All non-reformed sections are known as legacy sections. This terminology is used in the McCloud judgment.
Section	The membership data in Appendix D is categorised by section. Members who have legacy and reformed benefits, or legacy only benefits, will be categorised under the legacy section. Members who have reformed benefits only will be categorised under the reformed section.