



Government
Actuary's
Department

Scottish Teachers' Pension Schemes (‘STPS’)

Membership data

Actuarial valuation as at 31 March 2020

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20 October 2023



Highlights

STPS valuation data

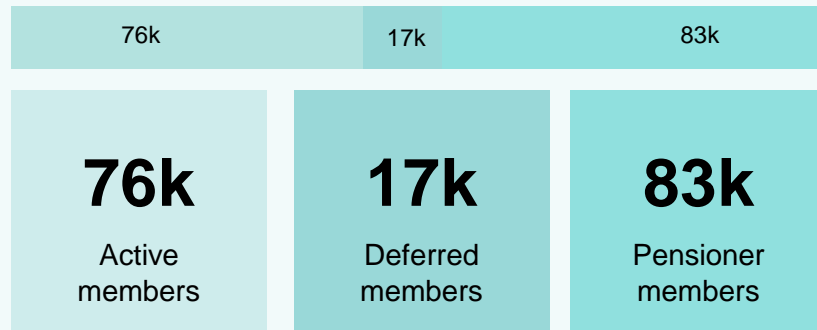


175k

Members as at
31 March 2020

- 3.1% vs. 2016

Membership split



Key headlines

There were significant data quality issues in the original STPS 2020 valuation membership data provided.

A number of additional datasets were provided by the scheme administrators, which included annual benefit statement information, an extract with updated salary information and P60 statement information. Using an agreed approach, these additional datasets were merged with the original membership data provided. Details behind the checks and processing of this merged dataset are provided in this report.

The administrators were not able to provide sufficient quality movements data in the time available. As a result, we were unable to use the movements data to inform the review of the scheme specific assumptions, or to support a reconciliation with membership data as at 31 March 2016.

Data quality after checks and adjustments



After making necessary adjustments detailed in this report, we conclude that the data is appropriate for the purpose of the 2020 STPS 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 the 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 [the standards](#) we apply.

1. Introduction

Who is this report for?

This report is addressed to Scottish Ministers.

HM Treasury’s Directions (‘the Directions’) requires 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 STPS 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 STPS annual Resource Accounts.

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?

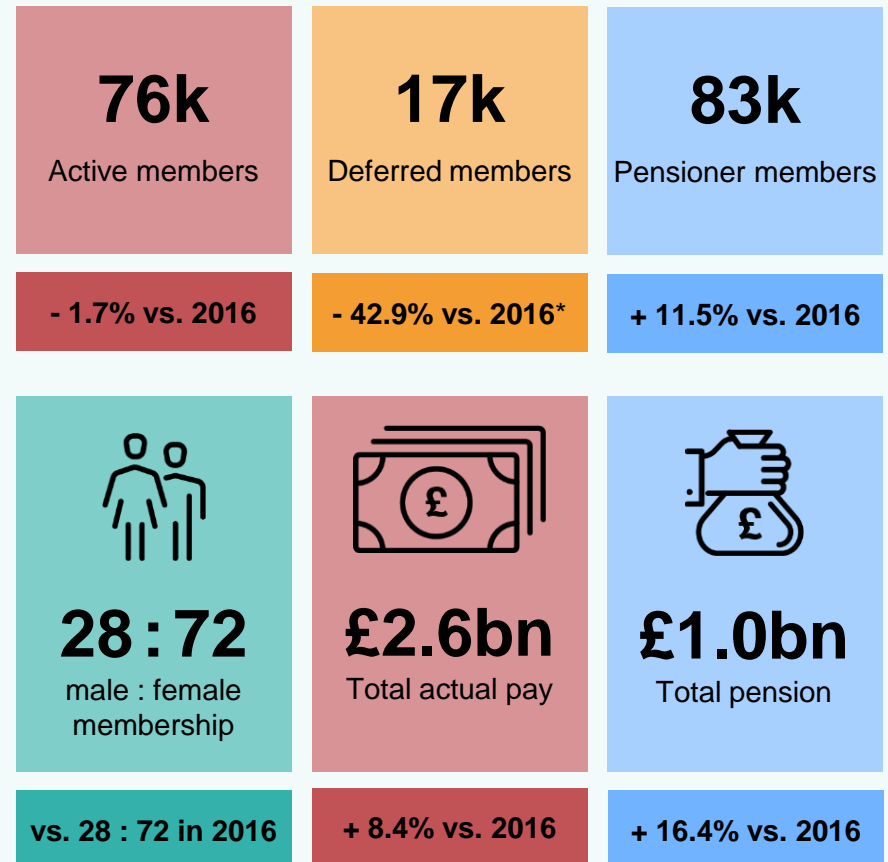
This data was wholly provided by the administrators of the STPS, the Scottish Public Pensions Agency ('SPPA').

What is the data used for?

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

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

Detailed data summaries are included in [Appendix A – Detailed summaries: data as at 31 March 2020](#).



Pension amount includes the April 2020 pension increase

*Please see page 18 for further details on the change in the number of deferred members.

3. Movements data

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

Movements data can also be 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.

Movements data received

Movements data for 2016 to 2020 was provided by the administrators of the STPS, SPPA.

Unfortunately, our analysis of the movements data provided for STPS concluded that it was not sufficiently credible to carry out a robust analysis of the scheme's experience since the previous valuation. As a result, we were unable to use the movements data to inform the assumptions review or to support a reconciliation with prior membership data.

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.

Checks and adjustments were done on the data post-merging.

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.

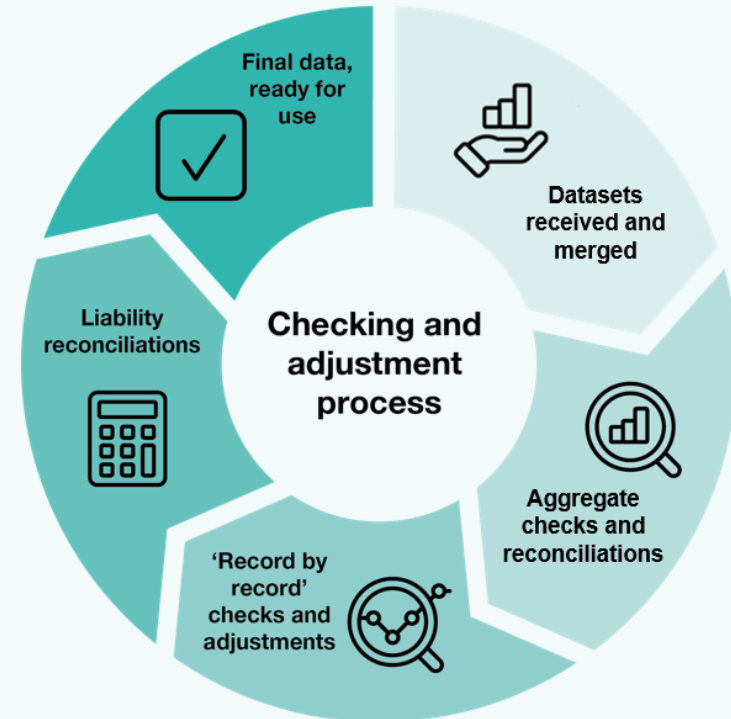
What happens to unreliable data?

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 B – Checks, adjustments and uncertainty](#).



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?

Scottish Ministers are responsible for ensuring appropriate data is provided in order to support the legislative requirement to perform a valuation.

It is SPPA'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 it should be noted that, due to the issues with the original data received, the statistics shown have only been calculated after datasets have been merged.

Can the data be used for the valuation?

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

Merging data

There were significant issues identified with the original STPS valuation data provided. The scheme administrators subsequently provided a number of additional datasets, and using an agreed approach, these additional datasets were merged with the original data. Details behind the checks and processing of this merged dataset are provided in this report. Data quality was then assessed on the dataset post-merging.

Data quality post-merging

Proportion of 'at 31 March 2020' records which we are able to use, after the merging of the datasets, as explained above:

99.1%

Actives

90.9%

Deferreds

99.8%

Pensioners

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 STPS valuation.

6. Impact of data limitations

Does merging data cause uncertainty?

Yes. Although merging the datasets was necessary to improve the quality of the data for valuation purposes, the merging process can also cause uncertainty. Our checks and adjustments were done post-merging.

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 cost cap cost of the scheme and any resulting impact on member benefits.

However, in large and complex datasets 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 [Appendix B – Checks, adjustments and uncertainty](#).



7. Limitations

Data

In preparing this report, GAD has relied on data and other information supplied by the scheme administrators, SPPA, as described in this 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.

HM Treasury Directions

Throughout this report, in any place where we indicate the potential variability of valuation results, these take into account the HM Treasury Directions for the 2020 valuations.

Sharing

This report has been prepared for the use of SPPA and Scottish Ministers. This report will be published as part of completing the 2020 valuation of the STPS, and we are content for SPPA 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 SPPA and Scottish Ministers, 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

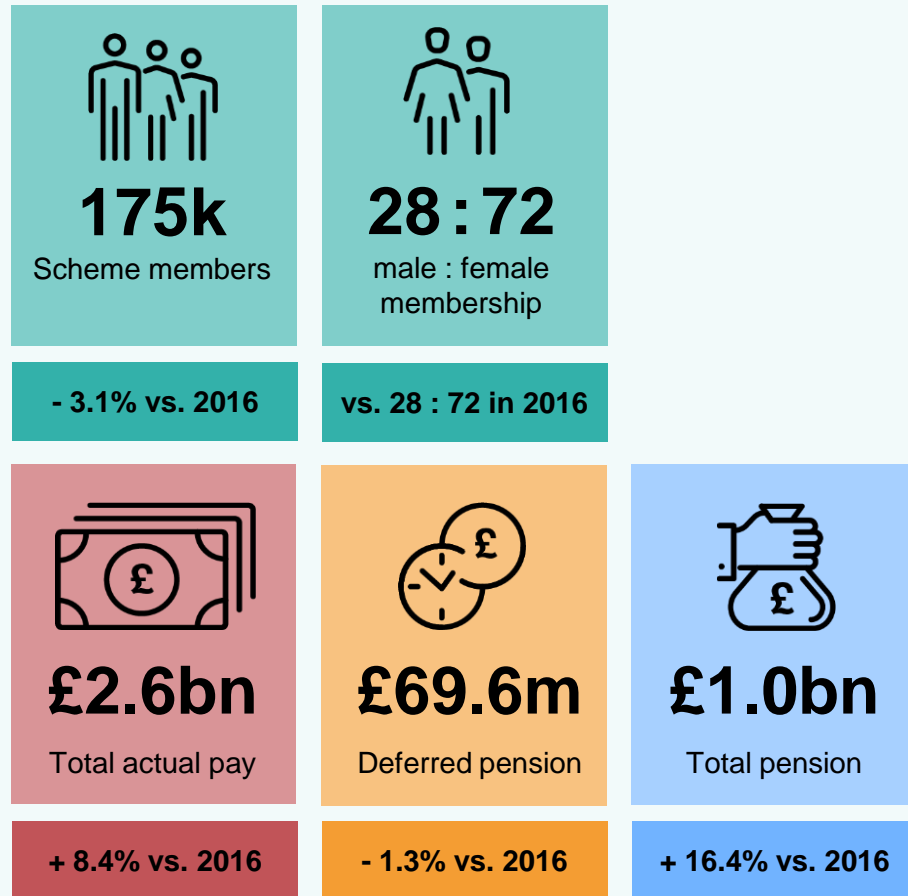
Detailed summaries: Data as at 31 March 2020



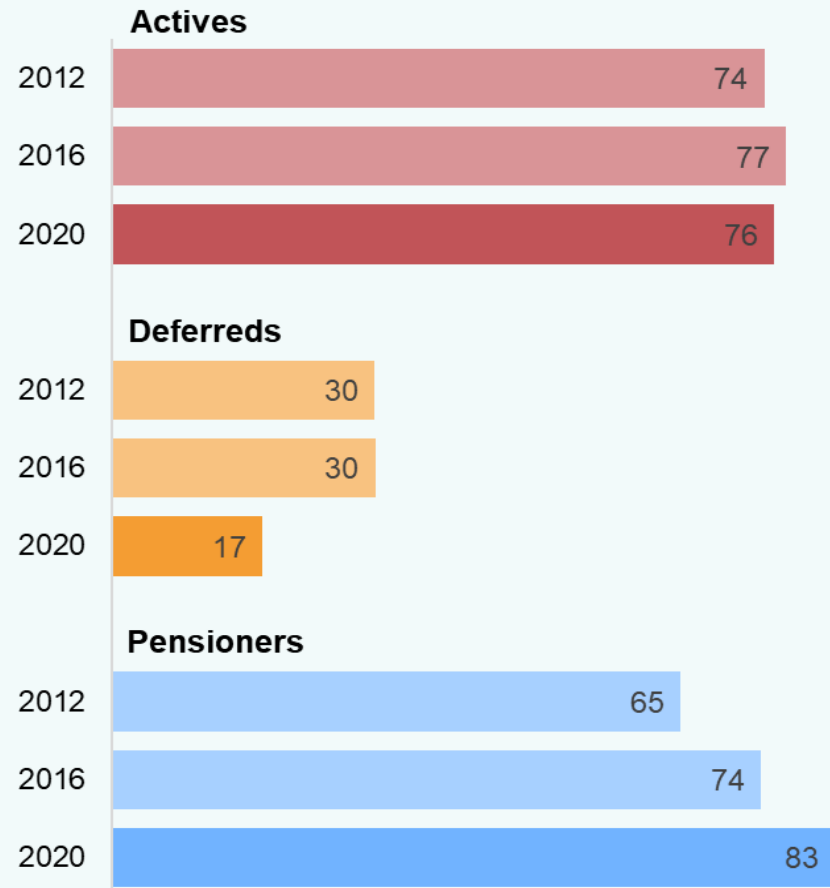
Scheme data

As at 31 March 2020

Summary statistics



Membership over time (000's)



Pension amounts include the April 2020 pension increase

Scheme membership

As at 31 March 2020

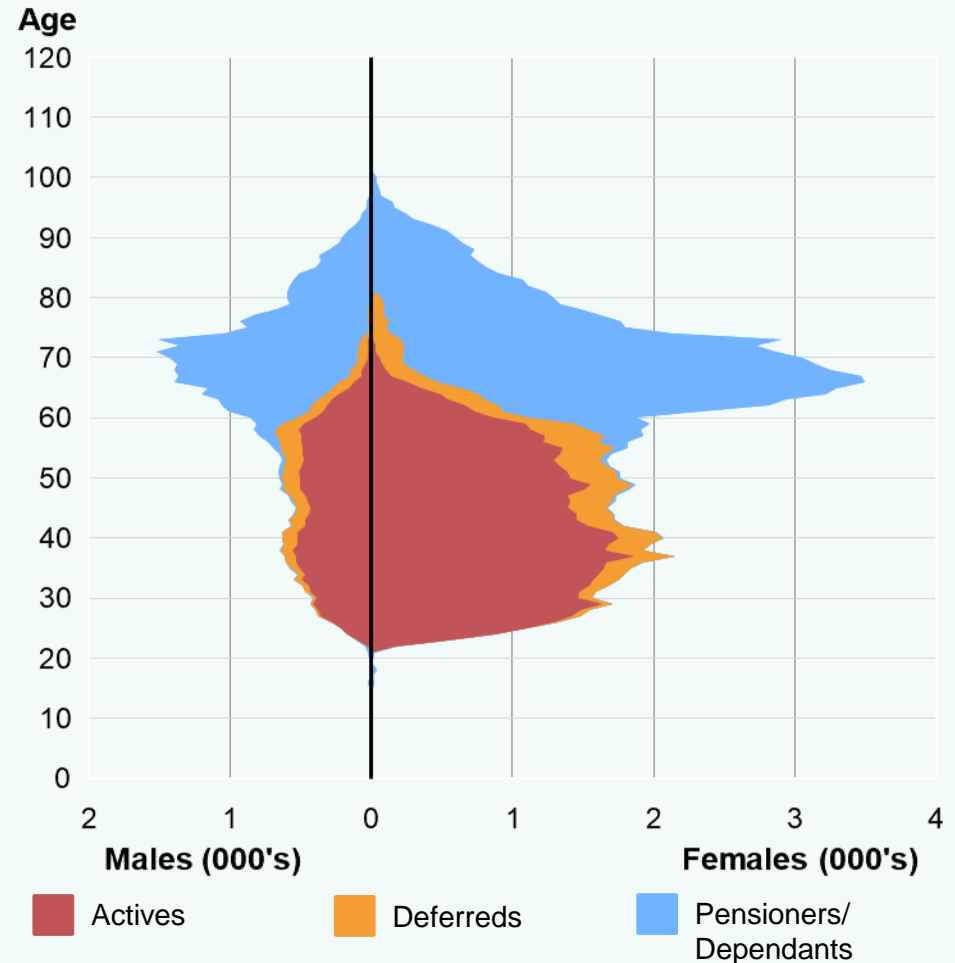
The chart shows the distribution of the membership by age and gender. There are significantly more female than male members across all categories.

Pensioner/dependant numbers begin increasing from around age 55 and peak between ages 65 and 75.

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

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

Membership distribution



Where can I see more?

[Appendix C – Tables of summary statistics](#)

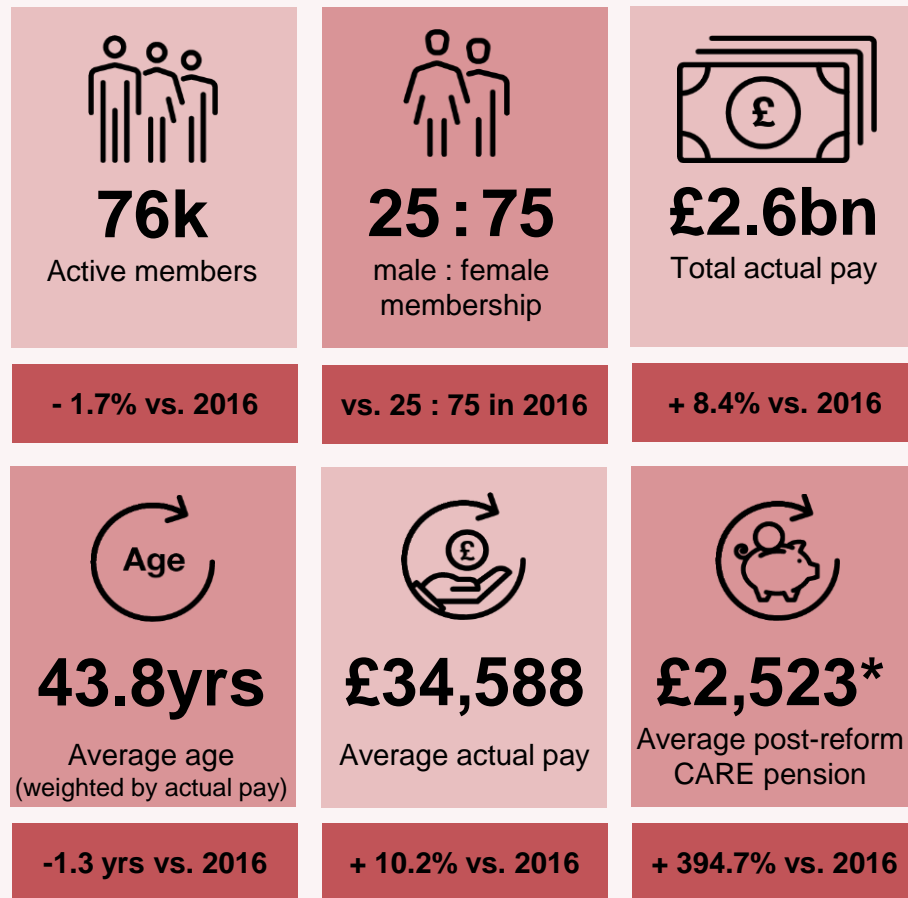
Actives



Actives data

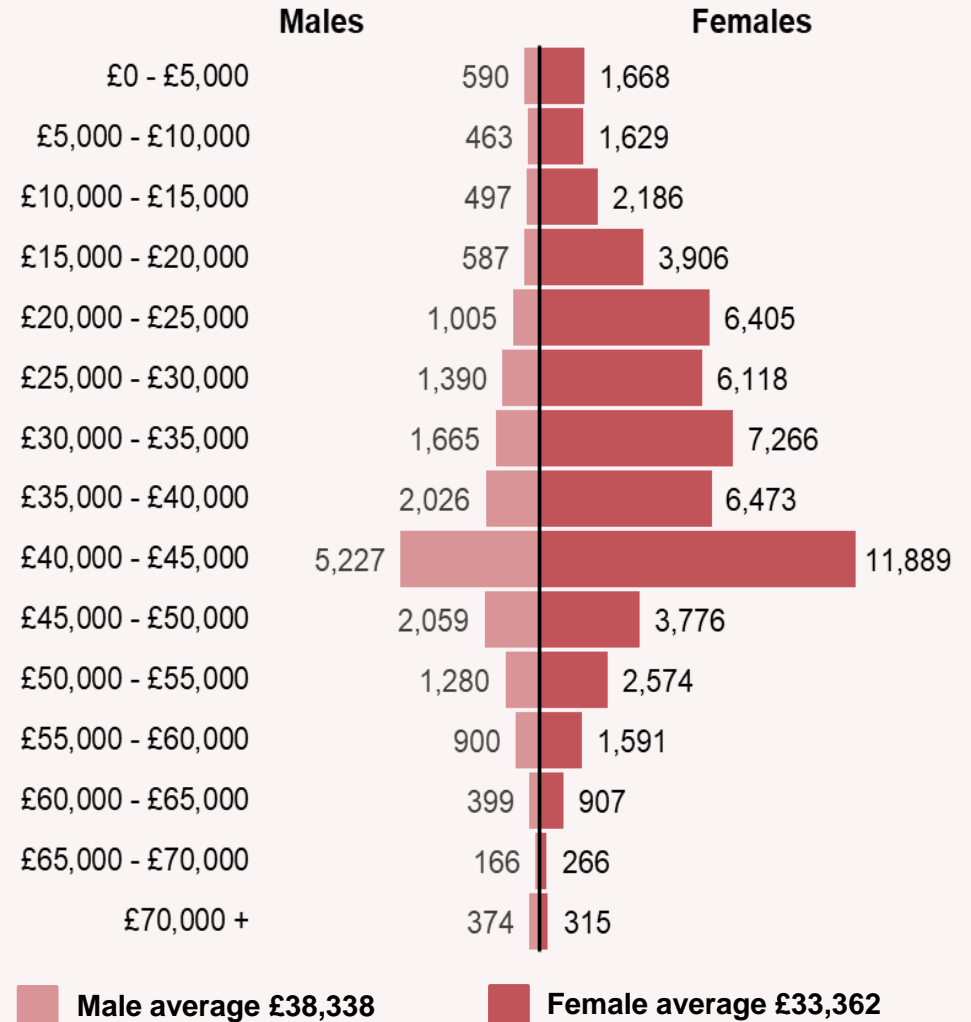
As at 31 March 2020

Summary statistics



* Average is only for members who have post reform CARE pension

Actual pay distribution



Active membership

As at 31 March 2020

For members with service before 2015, this chart shows the members' legacy scheme at the valuation date.

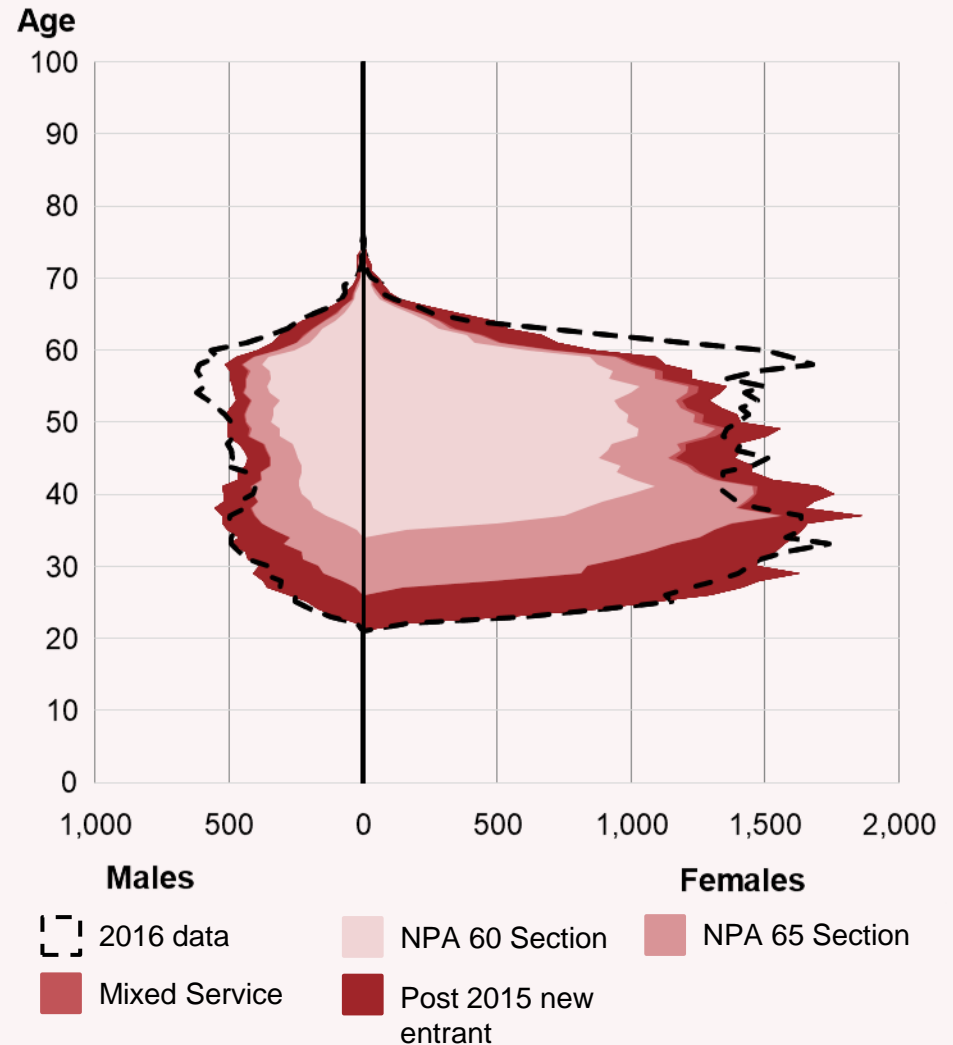
There are more female than male members across all ages.

The majority of active members have legacy NPA 60 Section or NPA 65 Section benefits.

Over time, the proportion of members with legacy NPA 60 Section or NPA 65 Section benefits should fall as members retire and are replaced by members with only 2015 Scheme benefits. From 1 April 2022, all future service will be in the 2015 Scheme.

There are some fluctuations in active membership numbers by age, but overall, the active membership profile by age is similar in 2020 compared with 2016.

Membership distribution



Where can I see more?

[Appendix C – Tables of summary statistics](#)

Defferreds



Deferreds data

As at 31 March 2020

Summary statistics



17k

Deferred members

- 42.9% vs. 2016

The number of deferred member records provided for the valuation has reduced significantly since 2016.

The administrators have advised that an exercise was carried out to better categorise those members eligible for a deferred pension. The pension for those now excluded is small as can be seen by the small change in total deferred pension since 2016 shown below.



27 : 73

male : female membership

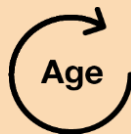
vs. 28 : 72 in 2016



£69.6m

Total deferred pension

- 1.3% vs. 2016

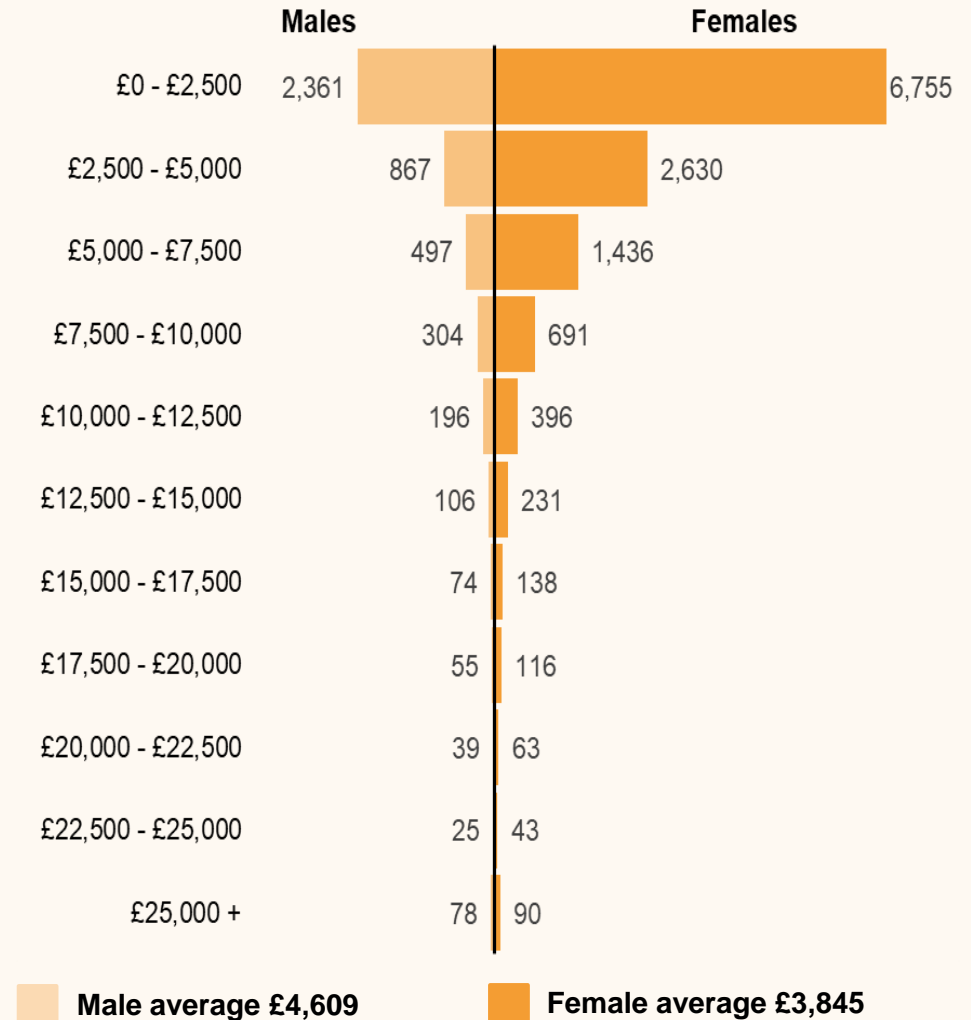


51.5 yrs

Average age (weighted by pension)

-3.5 yrs vs. 2016

Deferred pension distribution



Overall average £4,050

Pension amount includes the April 2020 [pension increase](#)

Deferred membership

As at 31 March 2020

For members with service before 2015, this chart shows the members' legacy scheme at the valuation date.

There are significantly fewer members of all ages in the 2020 data (as can be seen by the dotted line outside the shades of orange). The administrators have advised that an exercise was carried out to better categorise those members eligible for a deferred pension, ahead of the 2020 valuation. The number of deferred members as at 31 March 2020 is consistent with the deferred membership number as at 31 March 2020 shown in 2020-21 accounts.

There are more female members than male members across all ages.

The majority of deferred members have legacy NPA 60 Section or NPA 65 Section benefits (shown by the lightest two shades).

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

Membership distribution



Where can I see more?

[Appendix C – Tables of summary statistics](#)

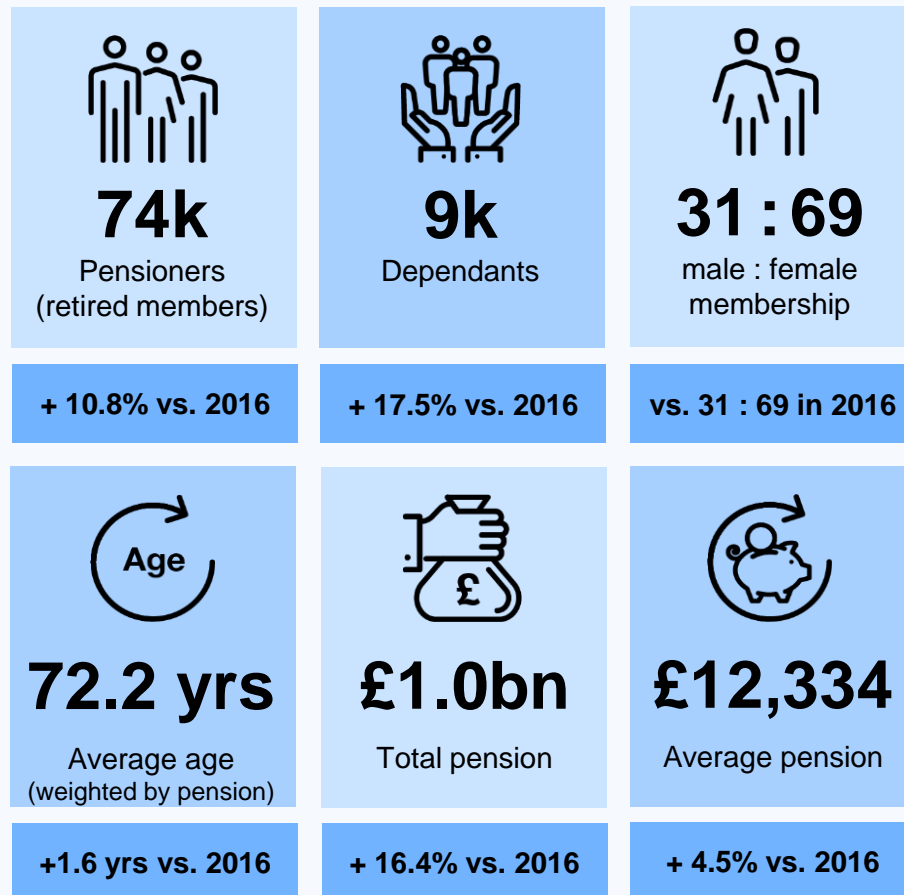
Pensioners



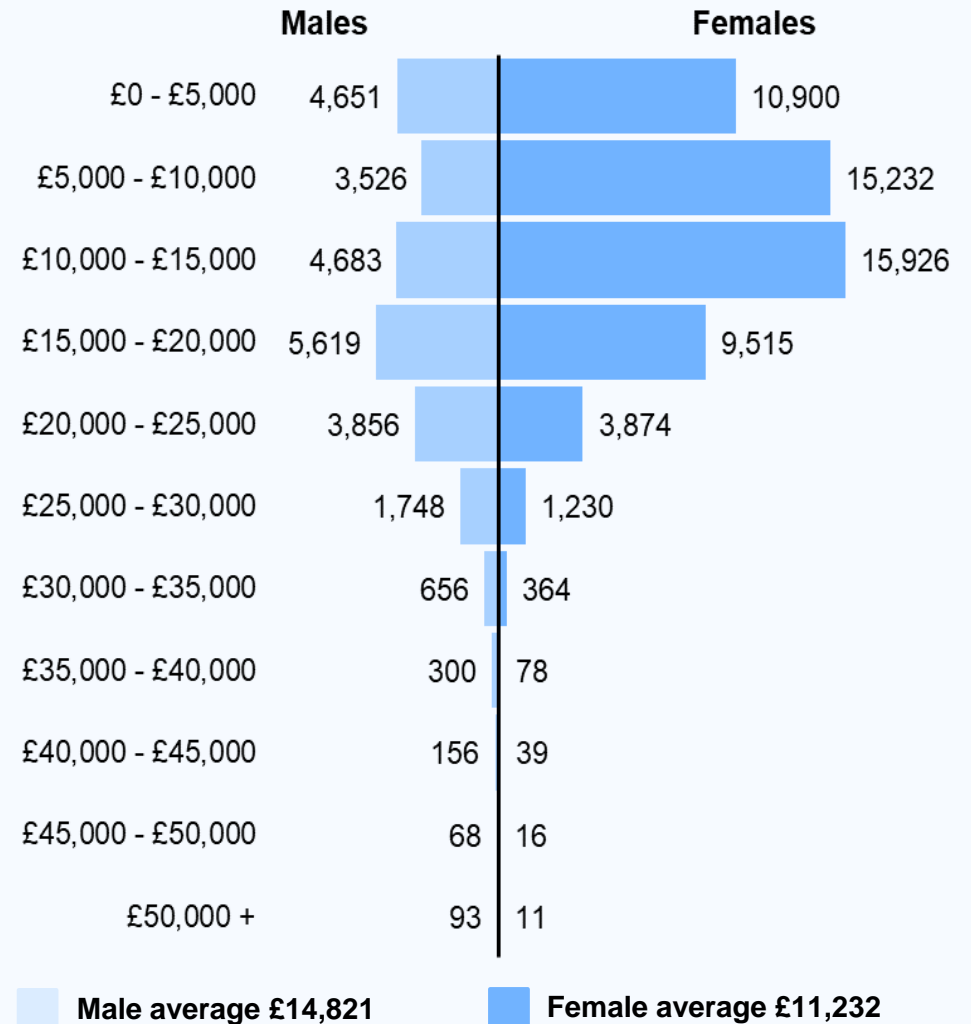
Pensioner data

As at 31 March 2020

Summary statistics



Pensioner data pension distribution



Pension amount includes the April 2020 pension increase

Pensioner membership

As at 31 March 2020

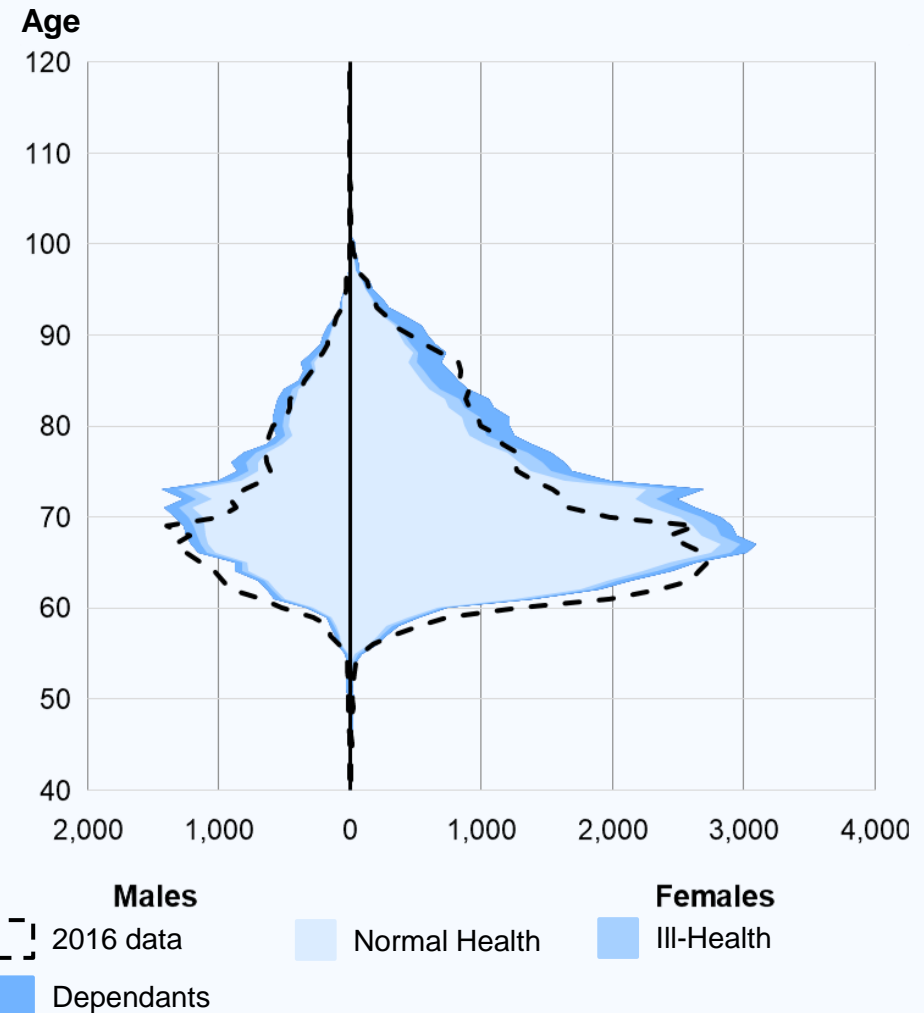
There are more female than male pensioners across all ages.

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).

Overall, compared with 2016 (shown by the dotted black line), the pensioner population has aged.

Membership distribution*



Where can I see more?

[Appendix C – Tables of summary statistics](#)

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

Appendix B

Checks, adjustments and uncertainties



Checking and adjustment process



1. Data received and merged

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

For STPS, it was necessary to merge multiple datasets before starting the aggregate checks and reconciliations.

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-by-record 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 actuarial liabilities 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.

‘Record by record’ checks and adjustments

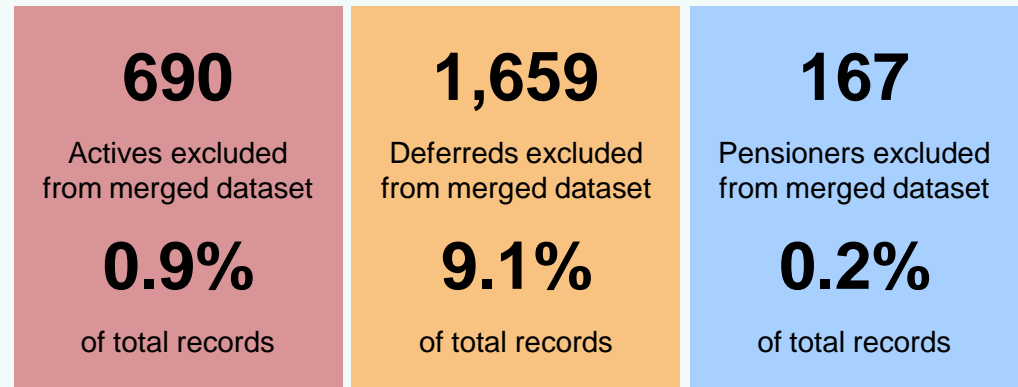
Process, limitations & uncertainty

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

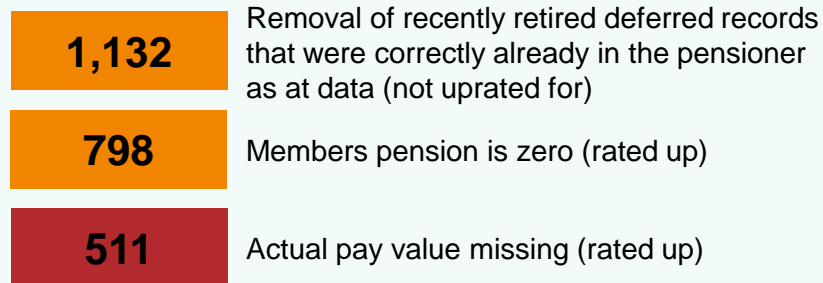
This process assumes that the membership profile of excluded records is consistent with the profile of the similar reliable records. However, to the extent that this is not the case, there is a degree of uncertainty in the valuation results. Further details are set out in the section of this appendix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

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

Summary of excluded records



Top 3 reasons for excluding records*



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.

* 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.

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 actuarial liability 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.

Other non-standard adjustments

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.

For STPS data, there were relatively few adjustments made as, due to various data quality issues, a number of additional datasets were provided by SPPA (including annual benefit statement information, an extract with updated salary information and P60 statement information), and merged before the data underwent the checking and adjustment phase.

Nevertheless, the key adjustments we have made for STPS are detailed below.

Actives:

- The merging process corrected the majority of issues with the original STPS actives dataset such that no major adjustments were subsequently required.
- Specifically, the merging process corrected issues in the original dataset relating to:
 - Actual and full-time equivalent pay
 - Legacy scheme service
 - Accrued CARE scheme pension

Deferreds:

- Records that were also in the pensioners dataset with a date pension commenced just after their date of leaving were removed. Most of these members became pensioners just before the valuation date.

Pensioners:

- Members with an unknown 'pensioner type' after the merging process were assigned the same 'pensioner type' as in the 2016 dataset (e.g. normal health pensioner, ill-health pensioner, dependant).
- If the 'pensioner' type was still missing, the record was assigned as a dependant.
- Spouse pensions were set to zero for dependants.
- An issue with missing gender of records was largely fixed through merging the various datasets.

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'.

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 is expected to have an impact of the order of $\pm 0.5\%$ 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 STPS valuation.

Appendix C

Tables of summary statistics



Summary statistics – introduction

Categorisation

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

- Members who have legacy benefits only as at 31 March 2020 will be categorised under their respective legacy section.
- 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 legacy section.
- Members who have reformed benefits only as at 31 March 2020 will be categorised under the reformed section.

Interpretation

The rest of this appendix summarises the scheme 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	100 +10	100 +10	200 +20
Legacy section 2	100 +10	100 +10	200 +20
Reformed section	100 +10	100 +10	200 +20
All sections	300 +30	300 +30	600 +60

Summary statistics – actives 1

As at 31 March 2020

Number of members

Section	Males	Females	Total
NPA 60 Section	7,771	24,836	32,607
	-3,311	-9,636	-12,947
NPA 65 Section	5,207	15,912	21,119
	-953	-1,806	-2,759
Mixed Service	145	656	801
	-774	-1,539	-2,313
Post 2015 new entrant	5,504	15,564	21,068
	+ 4,356	+ 12,366	+ 16,722
All sections	18,627	56,968	75,595
	-682	-615	-1,297

Average age* (years)

Section	Males	Females	Total
NPA 60 Section	51.0	49.3	49.8
	+ 0.5	+ 0.3	+ 0.4
NPA 65 Section	41.1	38.5	39.2
	+ 2.7	+ 3.4	+ 3.2
Mixed Service	52.9	50.4	50.9
	+ 3.1	+ 2.8	+ 2.6
Post 2015 new entrant	38.1	34.6	35.6
	+ 3.1	+ 3.7	+ 3.5
All sections	45.4	43.1	43.8
	- 1.2	- 1.3	- 1.3

* weighted by actual pay

Note: 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.

Summary statistics – actives 2

As at 31 March 2020

Total full-time equivalent pay (£m pa)

Section	Males	Females	Total
NPA 60 Section	378 - 21.0%	1,134 - 17.4%	1,512 - 18.3%
NPA 65 Section	231 + 3.7%	671 + 11.7%	902 + 9.6%
Mixed Service	7 - 82.5%	28 - 67.0%	34 - 71.8%
Post 2015 new entrant	- -	- -	- -
All sections	616 - 16.7%	1,833 - 10.9%	2,449 - 12.5%

Total actual pay (£m pa)

Section	Males	Females	Total
NPA 60 Section	349 - 20.3%	944 - 17.2%	1,293 - 18.1%
NPA 65 Section	207 + 12.0%	529 + 11.8%	736 + 11.8%
Mixed Service	5 - 81.0%	20 - 64.5%	25 - 70.1%
Post 2015 new entrant	153 + 494.6%	408 + 511.5%	561 + 506.8%
All sections	714 + 5.4%	1,901 + 9.5%	2,615 + 8.4%

Note: Full-time equivalent pay is only provided in respect of final salary members

Summary statistics – actives 3

As at 31 March 2020

Average full-time equivalent pay (£ pa)

Section	Males	Females	Total
NPA 60 Section	48,680 + 12.6%	45,664 + 14.7%	46,383 + 14.1%
NPA 65 Section	44,456 + 22.7%	42,162 + 24.4%	42,727 + 23.9%
Mixed Service	45,181 + 10.5%	42,452 + 10.3%	42,948 + 9.6%
Post 2015 new entrant	- -	- -	- -
All sections	46,965 + 15.3%	44,267 + 17.0%	44,916 + 16.5%

Average actual pay (£ pa)

Section	Males	Females	Total
NPA 60 Section	44,916 + 13.7%	37,995 + 14.9%	39,644 + 14.5%
NPA 65 Section	39,749 + 32.5%	33,255 + 24.5%	34,856 + 26.4%
Mixed Service	37,777 + 20.1%	30,121 + 19.0%	31,511 + 16.2%
Post 2015 new entrant	27,730 + 24.0%	26,214 + 25.7%	26,610 + 25.2%
All sections	38,338 + 9.3%	33,362 + 10.7%	34,588 + 10.2%

Note: Full-time equivalent pay is only provided in respect of final salary members

Summary statistics – actives 4

As at 31 March 2020

Average reckonable service (years)*

Section	Males	Females	Total
NPA 60 Section	16.7 - 0.1	15.0 - 0.3	15.4 - 0.2
NPA 65 Section	4.0 + 0.2	3.7 + 0.1	3.8 + 0.1
Mixed Service	10.4 0.0	7.9 - 0.7	8.4 - 0.8
Post 2015 new entrant	- -	- -	- -
All sections	11.6 - 0.4	10.5 - 0.7	10.8 - 0.7

*Unweighted (shown for final salary sections only)

Total post-reform CARE pension (£ m)

Section	Males	Females	Total
NPA 60 Section	22 + 506.0%	64 + 514.7%	86 + 512.5%
NPA 65 Section	17 + 483.1%	46 + 494.5%	63 + 491.4%
Mixed Service	~0 + 20.5%	2 + 127.4%	2 + 95.1%
Post 2015 new entrant	6 + >1000%	17 + >1000%	24 + >1000%
All sections	45 + 543.1%	129 + 559.0%	174 + 554.8%

~ means the figure is too small to report

Summary statistics – deferreds 1

As at 31 March 2020

Number of members

Section	Males	Females	Total
NPA 60 Section	2,721	7,795	10,516
	- 3,811	- 10,155	- 13,966
NPA 65 Section	1,246	3,024	4,270
	- 440	- 631	- 1,071
Mixed Service	155	589	744
	+ 90	+ 392	+ 482
Post 2015 new entrant	480	1,182	1,662
	+ 479	+ 1,179	+ 1,658
All sections	4,602	12,590	17,192
	- 3,682	- 9,215	- 12,897

Average age* (years)

Section	Males	Females	Total
NPA 60 Section	54.3	53.0	53.4
	- 2.5	- 2.8	- 2.7
NPA 65 Section	46.1	41.7	43.0
	+ 3.3	+ 4.0	+ 3.6
Mixed Service	59.0	59.6	59.4
	+ 5.8	+ 7.0	+ 6.6
Post 2015 new entrant	42.4	39.8	40.6
	+ 0.4	+ 4.1	+ 0.9
All sections	52.7	51.0	51.5
	- 3.1	- 3.7	- 3.5

* weighted by pension

Note: 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.

Summary statistics – deferreds 2

As at 31 March 2020

Total deferred pension (£m pa)

Section	Males	Females	Total
NPA 60 Section	16 - 24.4%	36 - 17.3%	52 - 19.6%
NPA 65 Section	4 + 152.2%	9 + 199.7%	13 + 183.5%
Mixed Service	1 + 221.1%	2 + 256.1%	3 + 246.2%
Post 2015 new entrant	~0 + >1000%	1 + >1000%	1 + > 1000%
All sections	21 - 8.0%	48 + 2.0%	70 - 1.3%

Average deferred pension (£ pa)

Section	Males	Females	Total
NPA 60 Section	5,903 + 81.5%	4,646 + 90.3%	4,972 + 87.1%
NPA 65 Section	3,155 + 241.2%	2,982 + 262.3%	3,033 + 254.6%
Mixed Service	5,323 + 34.3%	3,913 + 18.9%	4,207 + 21.7%
Post 2015 new entrant	821 + 100.3%	734 + 810.6%	759 + 366.0%
All sections	4,609 + 65.6%	3,845 + 76.6%	4,050 + 72.8%

Pension amount includes the April 2020 pension increase

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Summary statistics – pensioners 1

As at 31 March 2020

Number of members

Type	Males	Females	Total
Normal Health	20,699 + 1,556	46,852 + 5,881	67,551 + 7,437
Ill-Health	1,811 - 152	4,189 - 133	6,000 - 285
Dependants	2,845 + 781	6,145 + 559	8,990 + 1,340
All sections	25,355 + 2,185	57,186 + 6,307	82,541 + 8,492

Average age* (years)

Type	Males	Females	Total
Normal Health	72.8 + 1.7	71.4 + 1.4	71.9 + 1.5
Ill-Health	72.9 + 2.6	72.8 + 2.7	72.8 + 2.6
Dependants	69.1 + 2.3	76.7 + 0.6	75.0 + 0.6
All sections	72.7 + 1.7	71.9 + 1.4	72.2 + 1.6

* weighted by pension

Note: 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.

Summary statistics – pensioners 2

As at 31 March 2020

Total pension (£m pa)

Type	Males	Females	Total
Normal Health	335 + 12.2%	546 + 21.2%	880 + 17.6%
Ill-Health	29 - 0.8%	55 + 4.6%	84 + 2.7%
Dependants	12 + 45.1%	42 + 17.8%	54 + 22.9%
All sections	376 + 11.8%	642 + 19.3%	1,018 + 16.4%

Average pension (£ pa)

Type	Males	Females	Total
Normal Health	16,163 + 3.7%	11,644 + 6.0%	13,029 + 4.6%
Ill-Health	16,255 + 7.6%	13,113 + 7.9%	14,061 + 7.5%
Dependants	4,144 + 5.3%	6,803 + 7.0%	5,961 + 4.5%
All sections	14,821 + 2.2%	11,232 + 6.2%	12,334 + 4.5%

Pension amount includes the April 2020 pension increase

Appendix D

Glossary



Glossary 1

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 (referred to as the 2015 Scheme in this report).
Cost cap cost	<p>A way of measuring the cost of benefits being provided from the 2015 Scheme, which is then compared to a 'target cost'. The STPS target cost is set at 12.4% of pay.</p> <p>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 2015 Scheme (e.g., to the benefits provided) to bring the cost cap cost back to the target cost.</p>
Directions	<p>A document published by HM Treasury and referred to in The Public Service Pensions Act 2013, which sets out the process and requirements for carrying out valuations, including the results which need to be disclosed.</p> <p>Directions were first published in 2014 and have been updated since then.</p>
Employer contribution rates	<p>The percentage of scheme members' salaries which employers are required to pay in order to:</p> <ul style="list-style-type: none">• meet the costs of benefits currently being built up by active members• make good any shortfall in the notional amounts set aside to cover benefits already built up. <p>The result is heavily dependent on assumptions about future financial conditions and membership changes.</p>
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</u> and <u>legacy sections</u> of the scheme.

Glossary 2

Normal pension age	<p>The age at which a member in normal health is entitled to unreduced benefits. This age varies in different scheme sections:</p> <ul style="list-style-type: none"> • Age 60 for the legacy scheme benefits (NPA 60 Section) • Age 65 for the legacy scheme benefits (NPA 65 Section) • Members with mixed benefits could have a normal pension age of 60 (NPA 60 Section) and 65 (NPA 65 Section) – referred to as Mixed Service in this report. • State Pension Age (SPA) (ie currently ages 65 to 68 depending on date of birth) for the reformed scheme benefits.
Pension increase	<p>Public service pensions are increased under the provisions of the Pensions (Increase) Act 1971 and Section 59 of the Social Security Pensions Act 1975.</p>
Pension revaluation	<p>The rate at which the CARE pension is revalued each year a member is an active member.</p>
Professional actuarial requirements	<p>The professional requirements that we have complied with when completing this actuarial valuation include:</p> <ol style="list-style-type: none"> 1. Technical Actuarial Standards: TAS 100 and TAS 300, issued by the Financial Reporting Council (FRC) 2. The Actuaries' Code, issued by the Institute and Faculty of Actuaries ('IFoA') 3. The Civil Service Code. <p>GAD is also accredited under the IFoA's Quality Assurance Scheme. More details can be found in our terms of reference.</p>

Glossary 3

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 2013, and which came into force on 1 April 2015 (referred to as the 2015 Scheme 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 C 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 only reformed benefits have been categorised under the reformed section.