



Government
Actuary's
Department

Teachers' Pension Scheme (England and Wales) **Membership data**

Actuarial valuation as at 31 March 2020

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26 October 2023



Highlights

TPS valuation data



2.105m

Members as at
31 March 2020

+8.4% vs. 2016

Initial data quality

100%

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

Improvement vs. 99.9% in 2016

Key headlines

The overall quality of the Teachers' Pension Scheme (TPS) valuation data remains high.

The main issue we noted in our 2016 data report was the challenge of identifying members who were in active pensionable service at the valuation date. However, the 2020 data shows a significant improvement in this respect, primarily due to the implementation of monthly data collection from employers.

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 TPS valuation. However, a different approach to adjusting data could still lead to different valuation results.

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Report on data quality

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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 the Secretary of State for Education.

HM Treasury's Directions ('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 TPS 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 TPS 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?

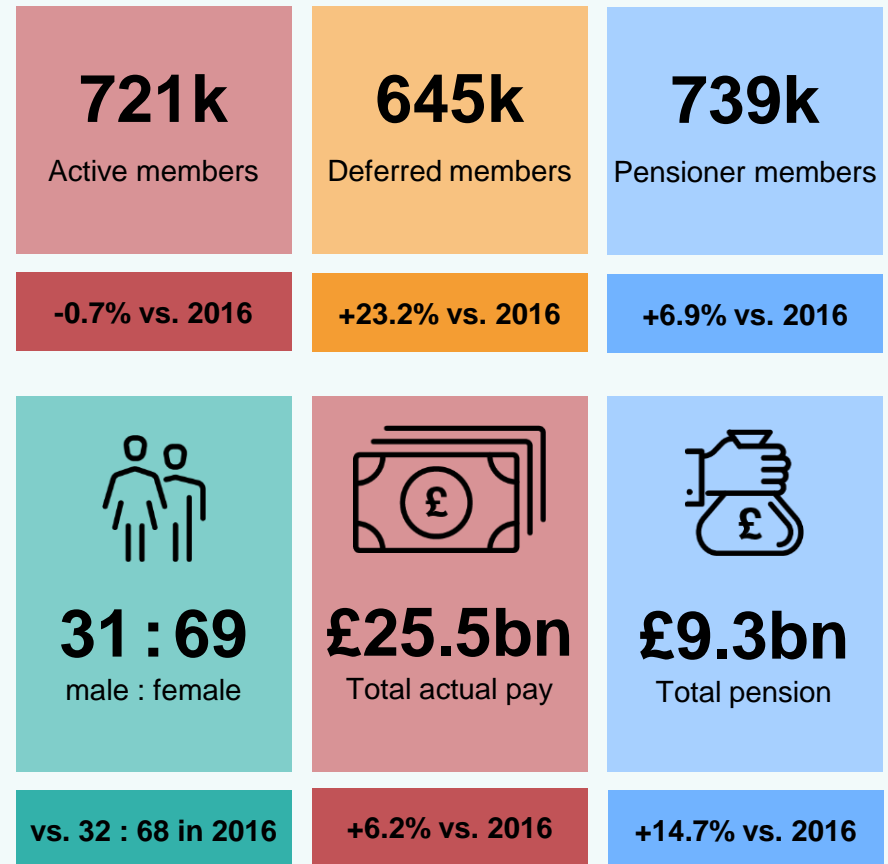
This data was wholly provided by the administrators of the TPS, Teachers' Pensions.

What is the data used for?

It will be used to calculate the results of the 2020 TPS 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

3. Movements data

Where did the data come from?

This movements data for 2016 to 2020 was wholly provided by the administrators of the TPS, Teachers' Pensions.

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

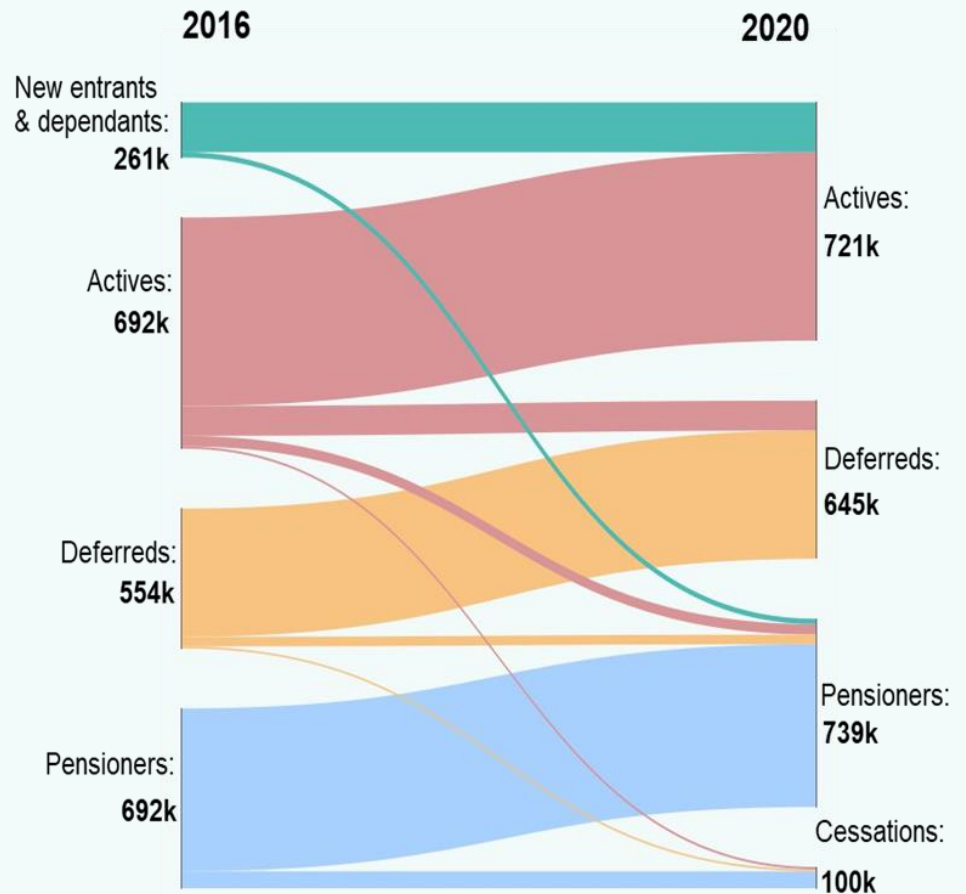
This movements data is also used to perform a reconciliation which compares data as at 31 March 2016 and 31 March 2020 against movements occurring between this period to check that membership figures are in agreement.

Where can I find out more?

Detailed data summaries are included in [Appendix B – Detailed summaries: movements data](#).

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.

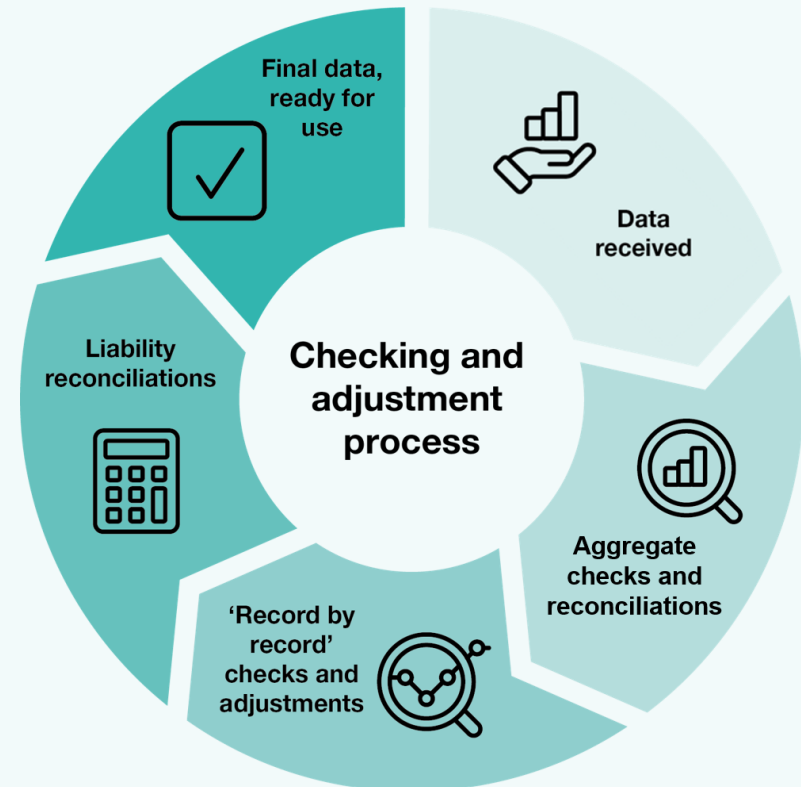
What happens to unreliable data?

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 uncertainty](#).



After checks & adjustments:

After finalising our checks and adjustments we consider potential data improvements. We will engage with the scheme manager 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 Secretary of State for Education is responsible for ensuring appropriate data is provided in order to support the legislative requirement to perform a valuation.

It is the Department for Education’s responsibility to ensure that data that is provided is in line with our specifications.

Was the data provided of good quality?

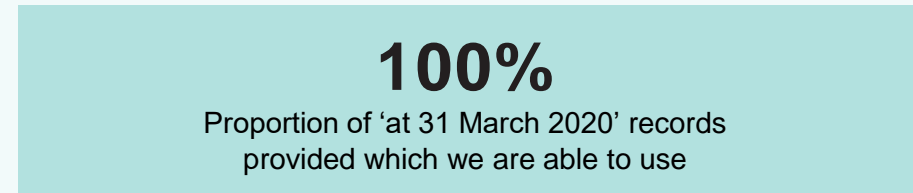
The percentage of data which was able to be used and not subject to exclusion is shown to the right. High percentages suggest good quality data.

However, please note that, whilst the proportion of records that we were able to use in 2016 was high across each of the membership categories, we applied a significant adjustment to the active and deferred membership to ensure active member pay was consistent with contributions received by the scheme. This adjustment wasn’t needed in 2020. Further detail on the split of active and deferred records in the 2020 data is provided on page 30.

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

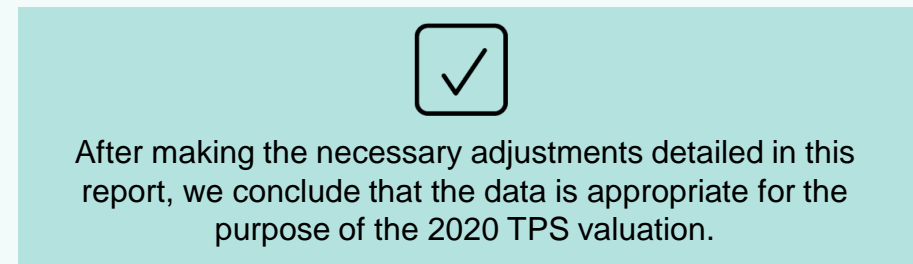


Improvement vs. 99.9% in 2016



* In 2016 we applied a significant adjustment to the active and deferred membership to ensure active member pay was consistent with contributions received by the scheme

Data quality after checks & adjustments



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 cost cap cost 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 [Appendix C – Checks, adjustments and uncertainties](#).



7. Limitations

Data

In preparing this report, GAD has relied on data and other information supplied by Teachers' Pensions 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.

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 the Secretary of State for Education and the Department for Education.

We are content for the Department 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 the Secretary of State for Education and the Department for Education, 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.

This report will be published by GAD as part of completing the 2020 valuation of the scheme.

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

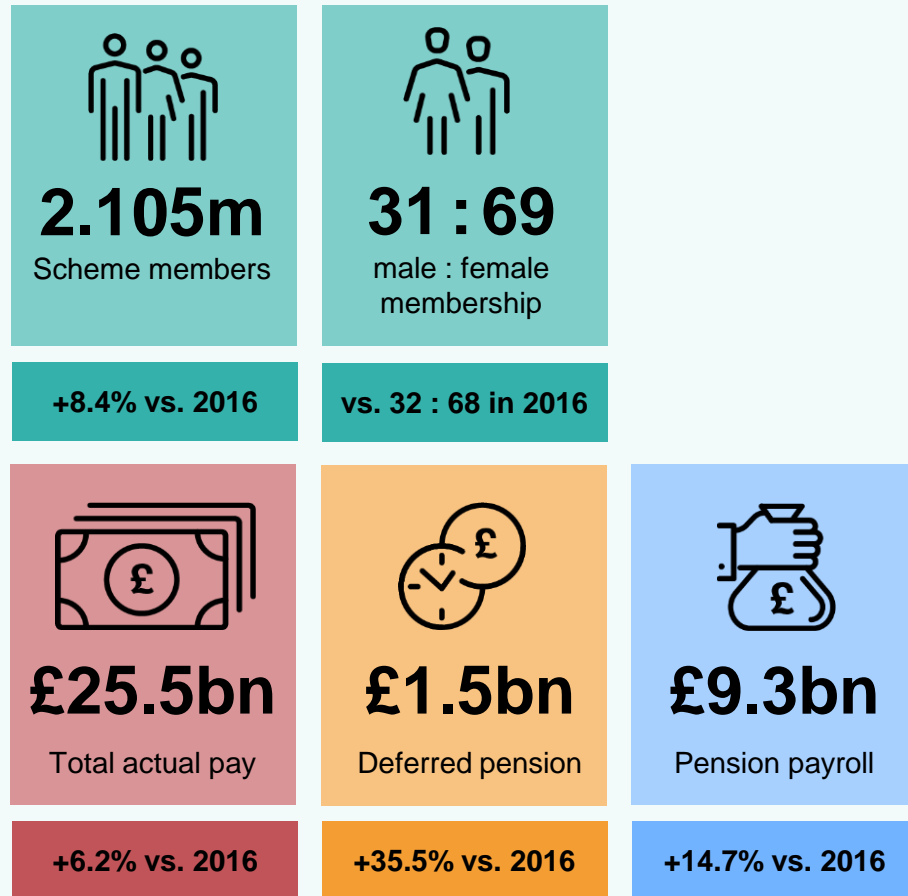
Detailed summaries: Data as at 31 March 2020



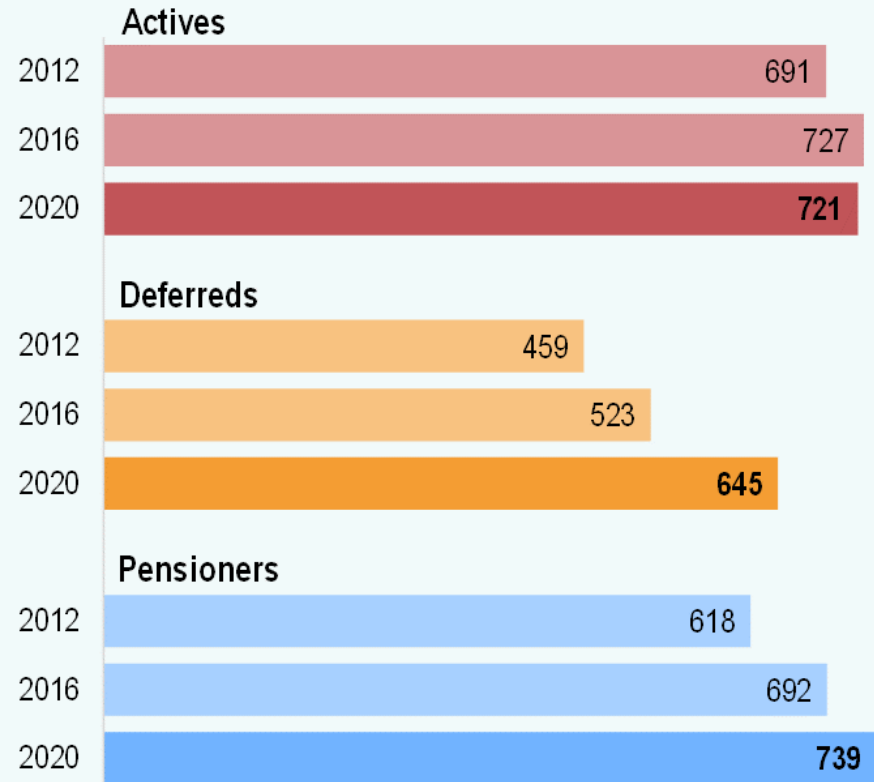
Scheme data

As at 31 March 2020

Summary statistics



Membership over time (000's)



Pension amount includes the April 2020 pension increase

Pensioners above includes all members in receipt of a pension (including dependants)

Scheme membership

As at 31 March 2020

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.

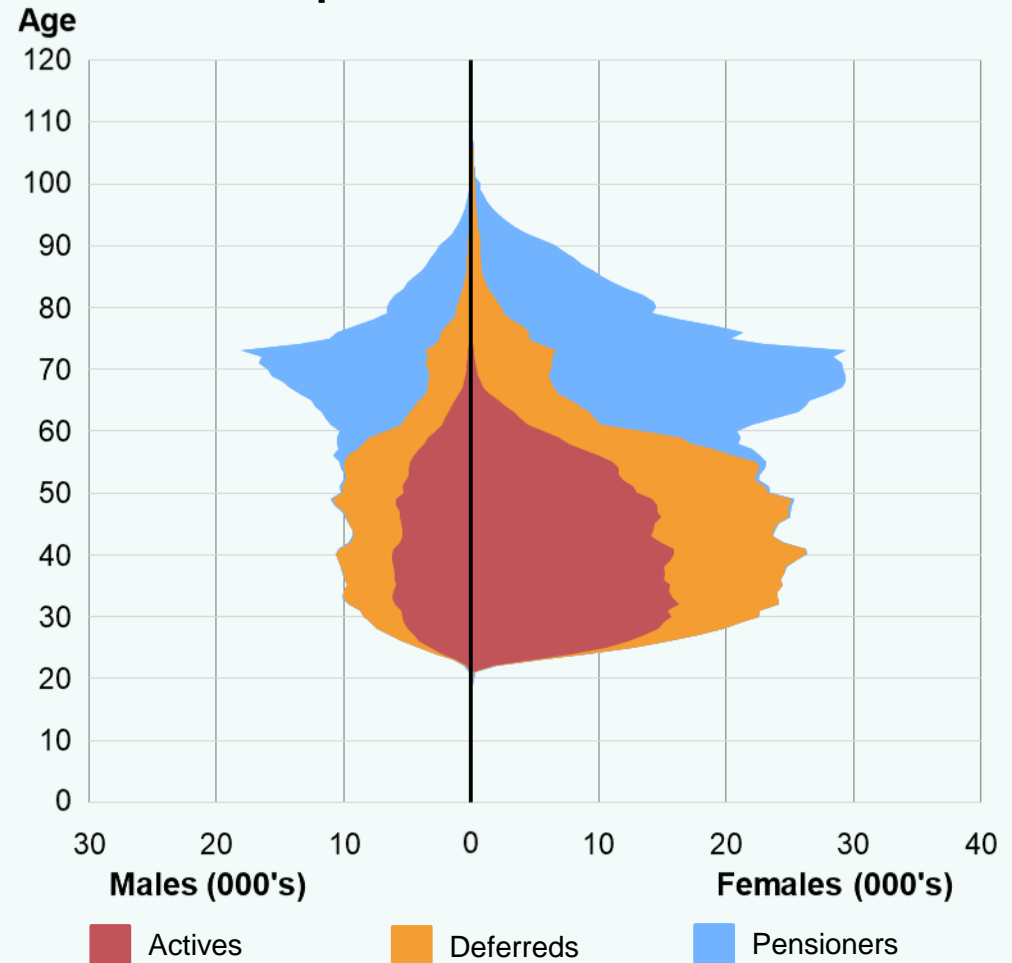
This corresponds with generally declining numbers of active members and deferred members.

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

Where can I see more?

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

Membership distribution



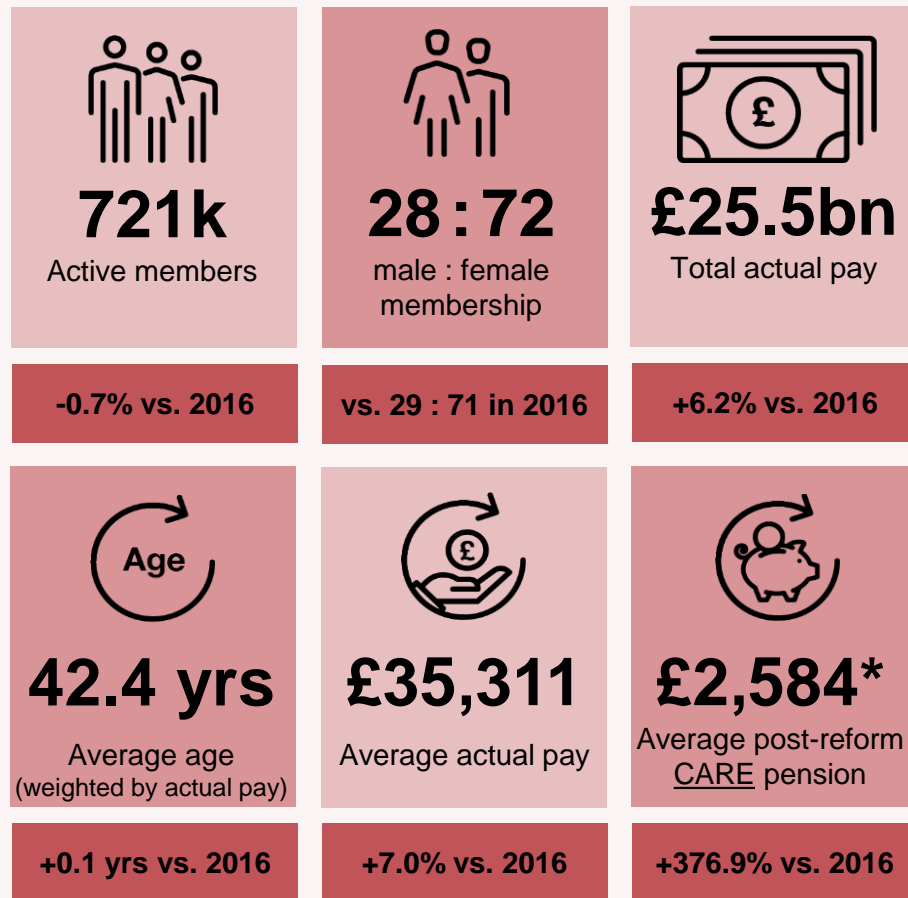
Actives



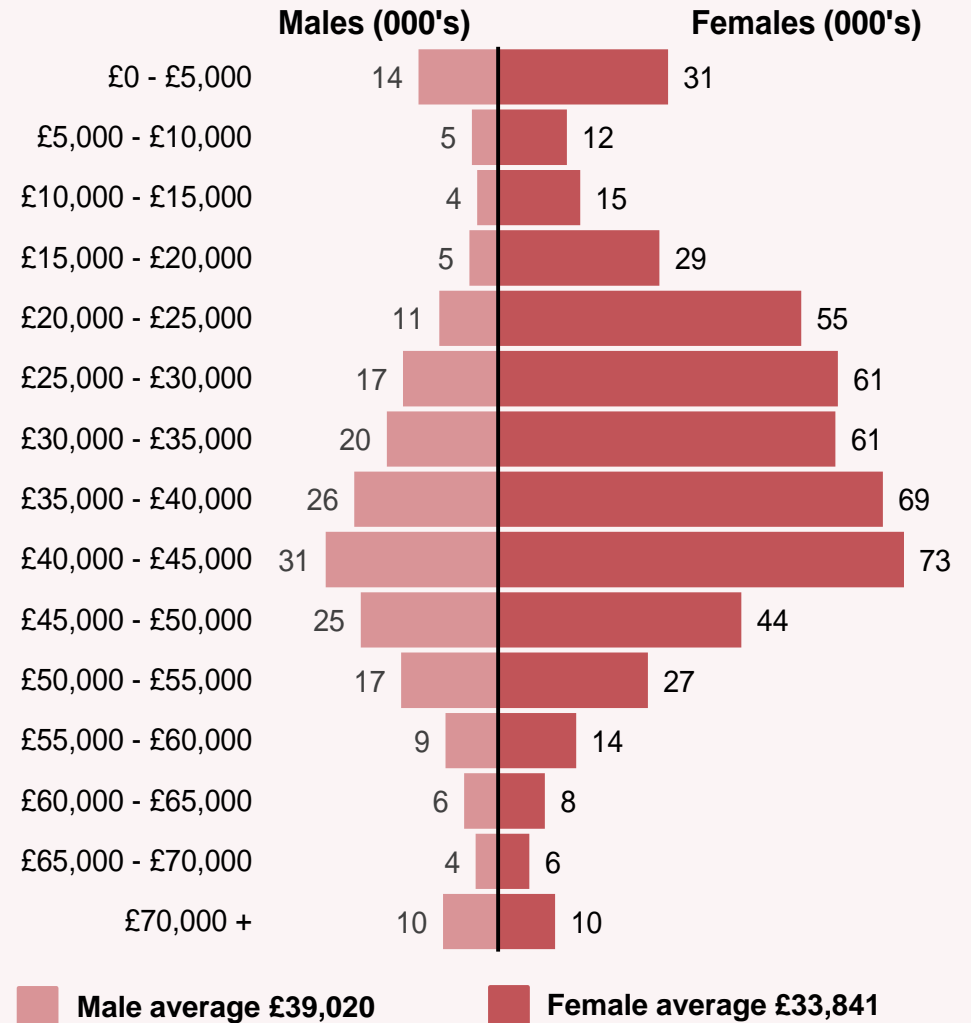
Actives data

As at 31 March 2020

Summary statistics



Annual actual pay distribution



* Average is only for members who have post-reform CARE pension
 Post-reform CARE pension includes pension revaluation to April 2020

Active membership

As at 31 March 2020

Where applicable, for the purpose of the chart, members have been assigned to the legacy section they have already accrued benefits in, even if they have now started to accrue benefits in the reformed section. See 'Summary statistics – introduction' in Appendix D for more details.

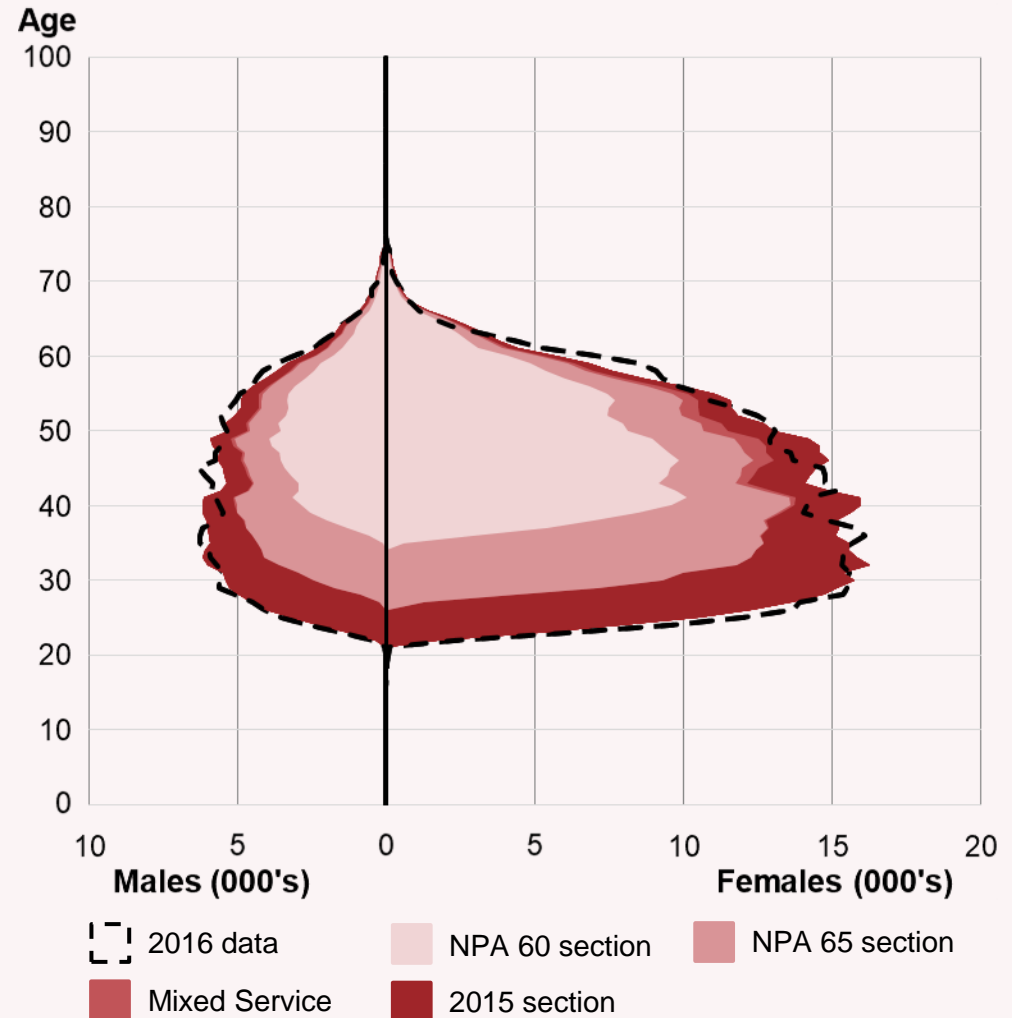
There are more female members across all ages.

The majority of active members are in the NPA 60 section or NPA 65 section (shown by the two lightest shades).

Over time, the numbers in these sections should fall as members retire and are replaced by members of the 2015 section. From 1 April 2022, all future service will be in the 2015 section.

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 D – Tables of summary statistics](#)

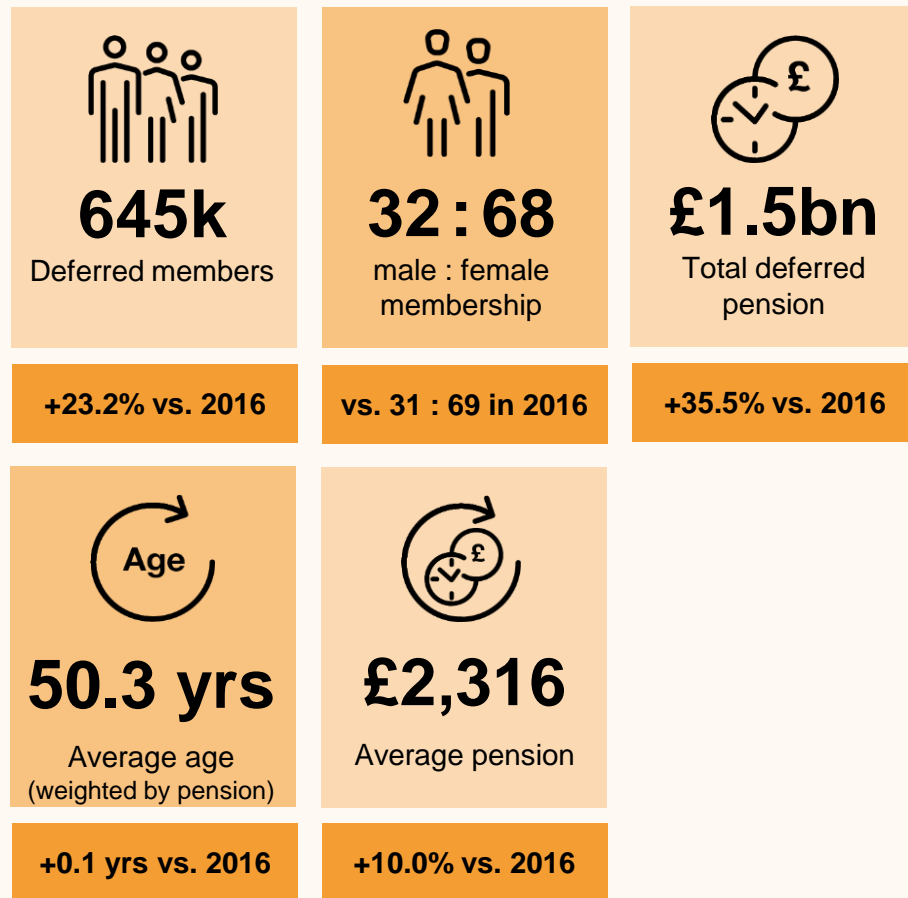
Defferreds



Deferreds data

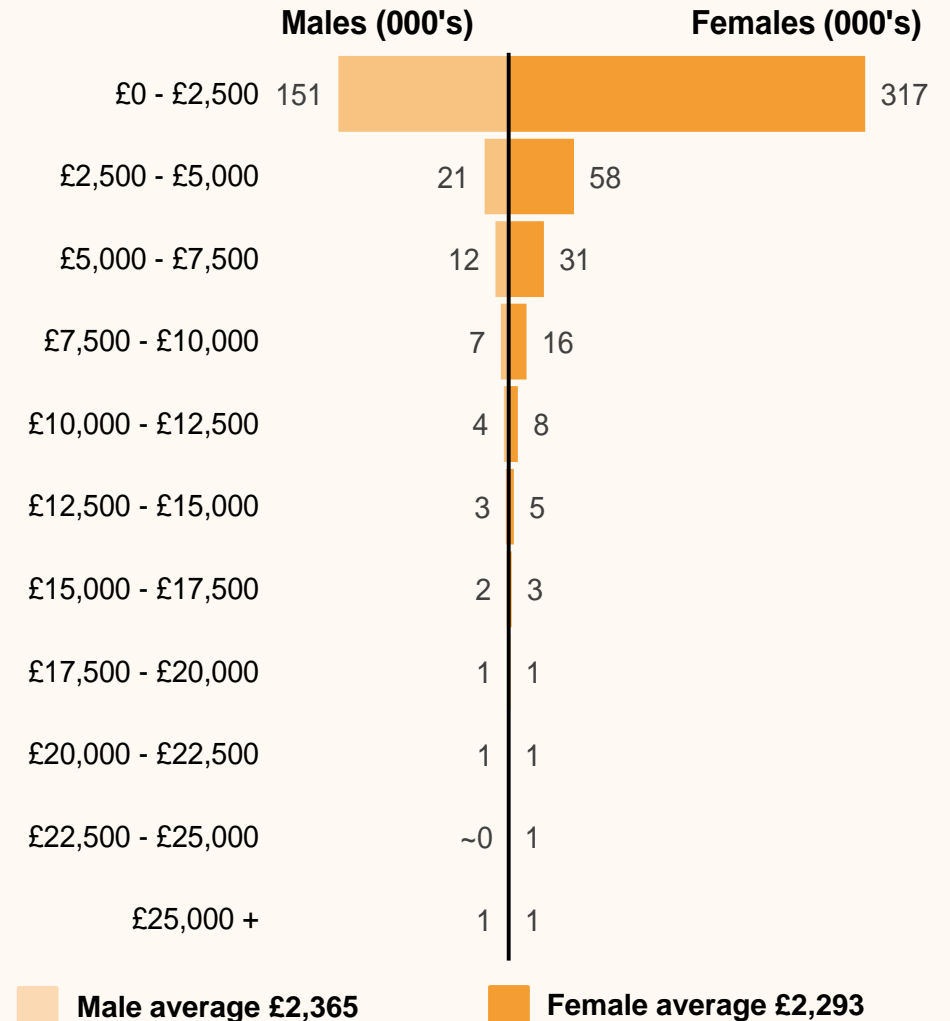
As at 31 March 2020

Summary statistics



Pension amount includes the April 2020 pension increase

Deferred annual pension distribution



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Deferred membership

As at 31 March 2020

Where applicable, for the purpose of the chart, members have been assigned to the legacy section they have already accrued benefits in, even if they have now also accrued benefits in the reformed section. See 'Summary statistics – introduction' in Appendix D for more details.

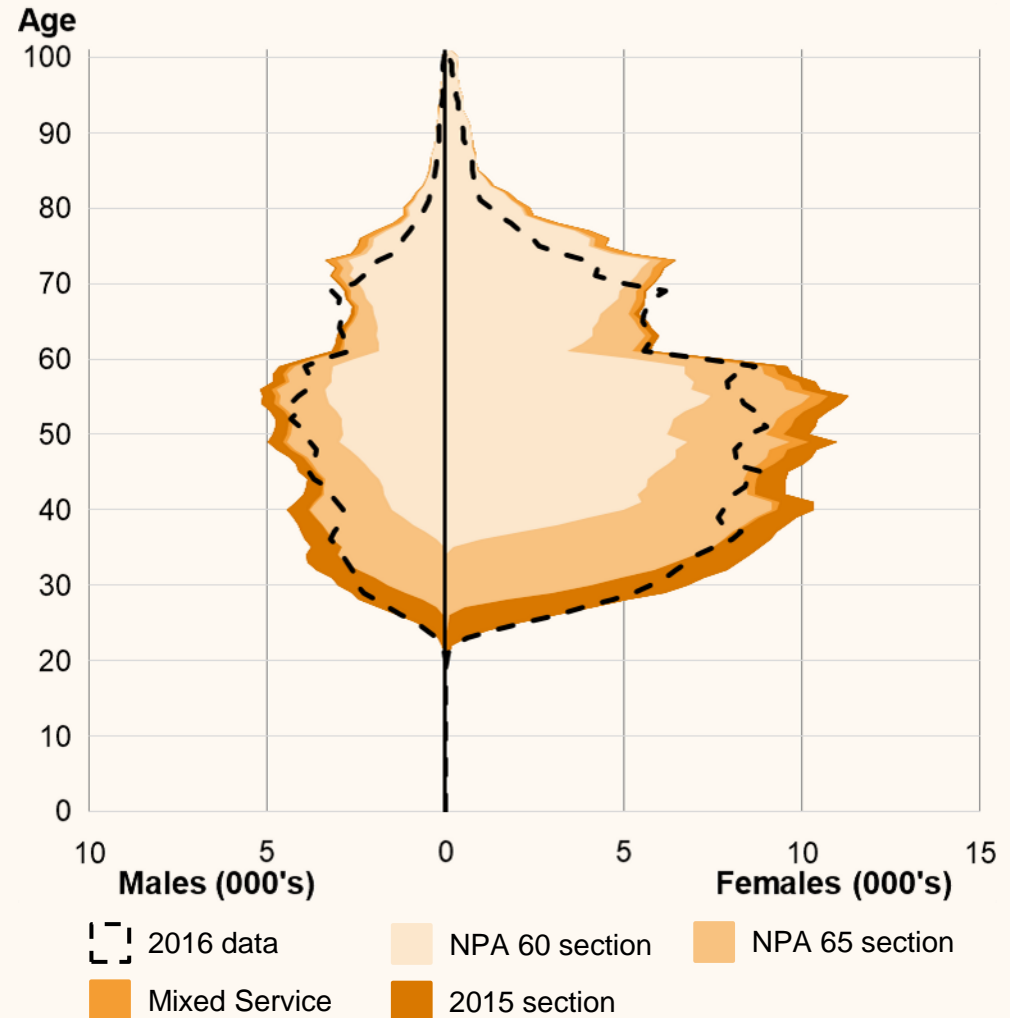
There are more female members than male members across all ages.

The majority of deferred members are in the NPA 60 section or NPA 65 section of the scheme (shown by the two lightest shades).

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

Overall there are more deferred members across all ages at 2020 compared with 2016, aside from ages 60-70 where the numbers are similar.

Membership distribution



Where can I see more?

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

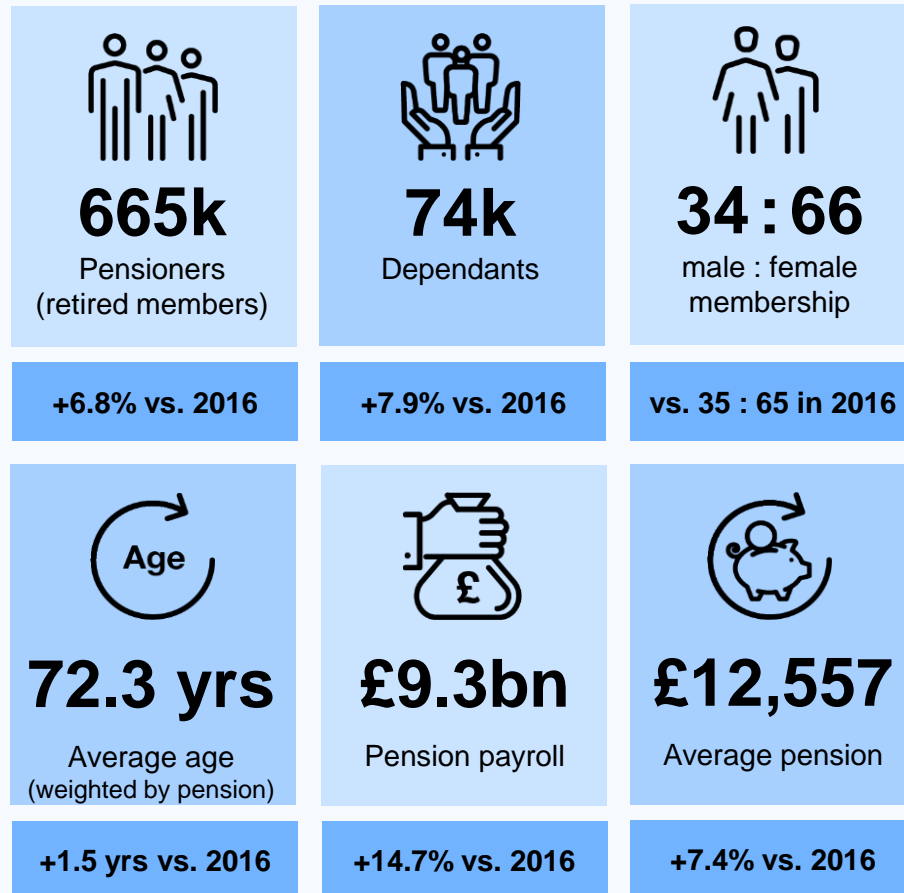
Pensioners



Pensioner data

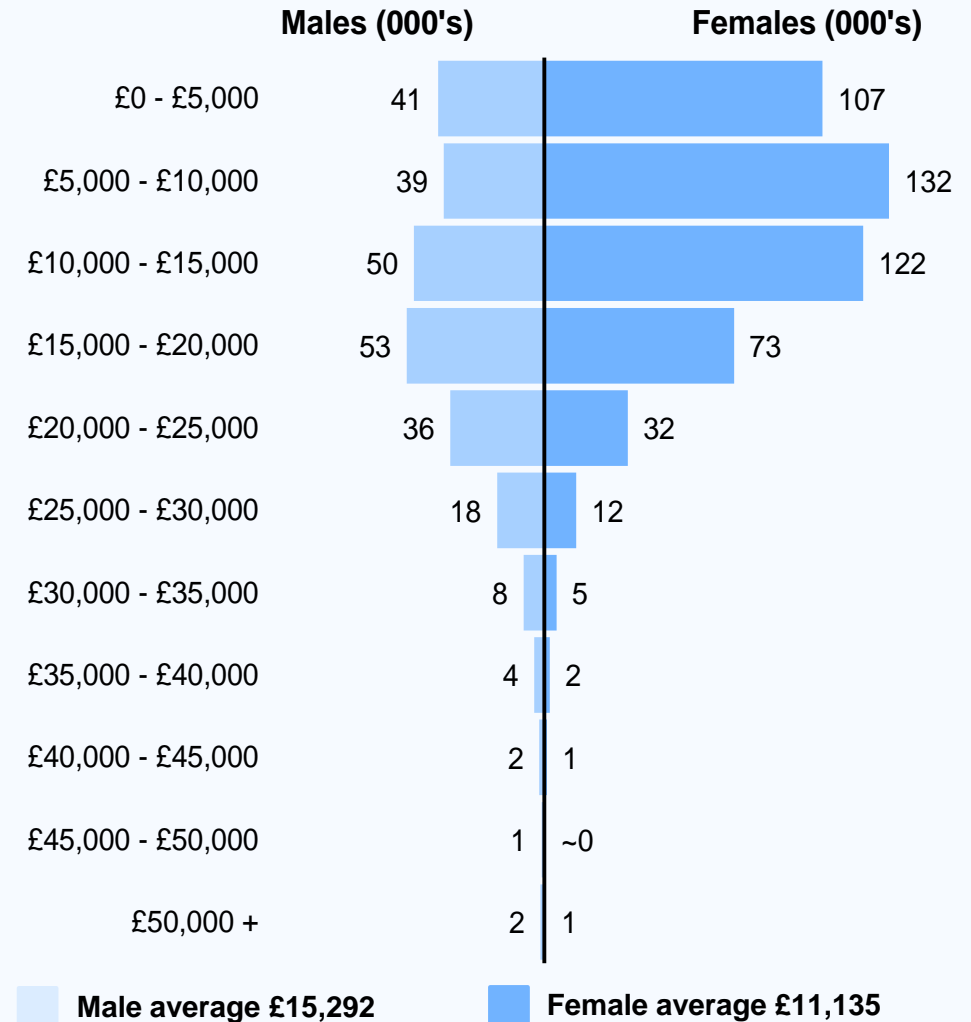
As at 31 March 2020

Summary statistics



Pension amount includes the April 2020 pension increase

Pensioner data annual pension distribution



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Pensioner membership

As at 31 March 2020

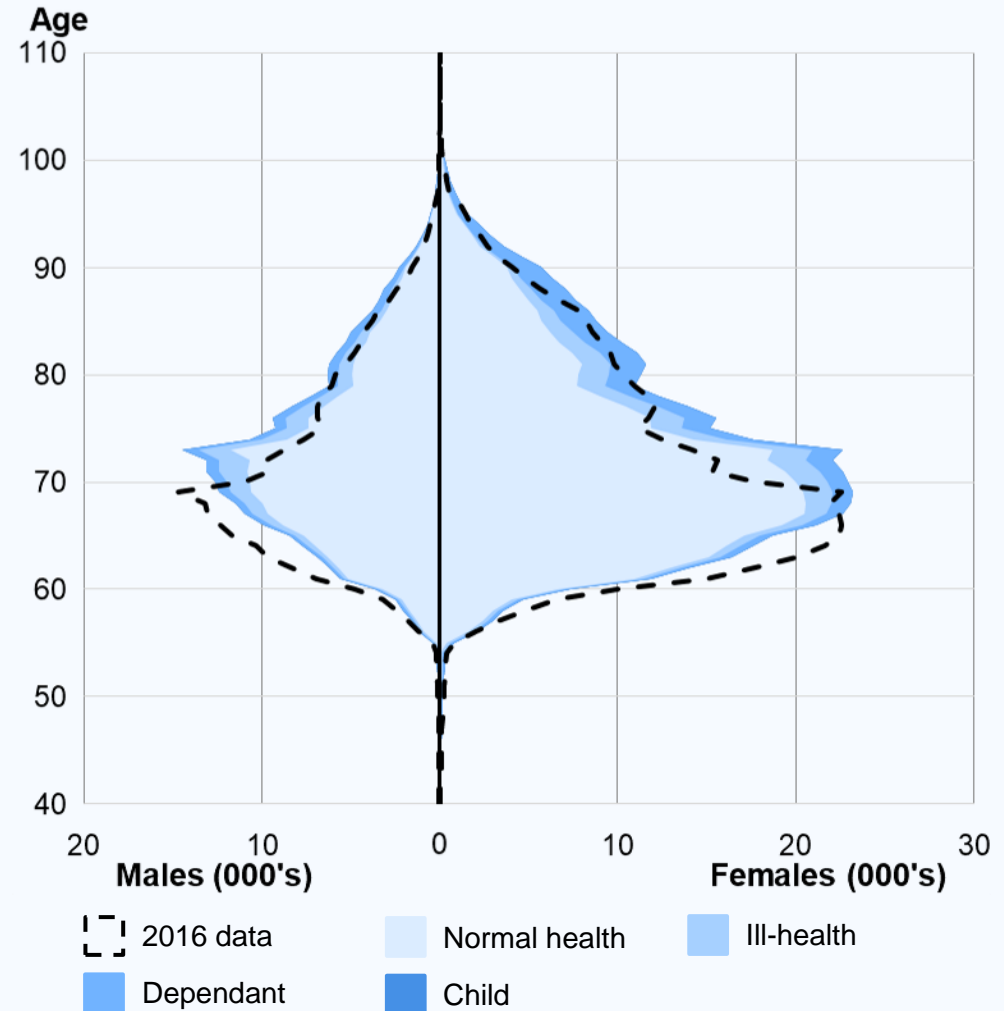
There are more female than male pensioners across all ages.

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

The chart also shows those who retired in ill-health and dependant pensioners (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 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

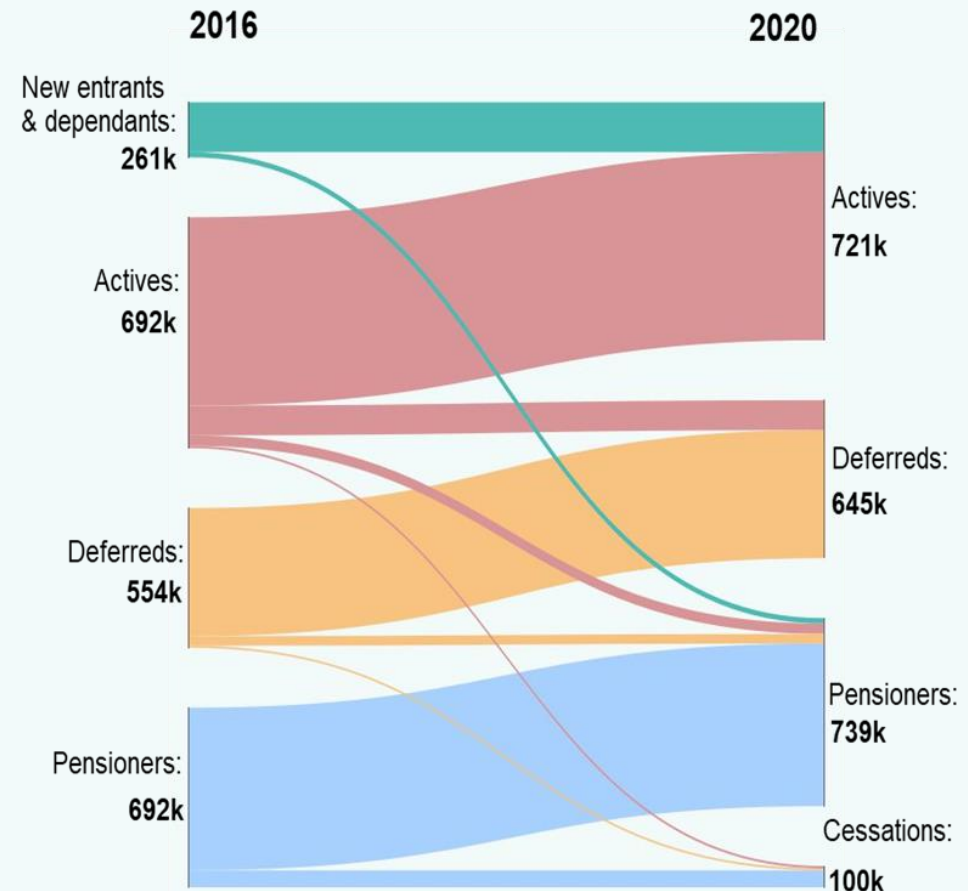
New entrants to active status include people who are new to the profession, as well as teachers who are returning to employment following retirement. The number of members at 2016 is calculated by taking the original member data provided by Teachers' Pensions for the 2016 valuation and adjusting for changes after the data was provided (see next slide for more information).

Deferreds

The movement between active and deferred status is shown on a net movements basis, that is the total number of members moving from active to deferred status less the number of deferred members returning to employment. The number of members at 2016 is calculated by taking the original member data provided by Teachers' Pensions for the 2016 valuation and adjusting for changes after the data was provided (see next slide for more information).

Pensioners

Reasons for cessation from pensioner status include pensioner deaths and members no longer being eligible for a pension from the scheme – 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). Figures are rounded to the nearest thousand.

The intermediate rows summarise the membership movements provided over the period, as illustrated in the previous slide.

Reconciliation

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

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

- Actives: **-5k** members
- Deferreds: **4k** members
- Pensioners: **1k** members.

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

	Actives	Deferreds	Pensioners
Number at start of period[#]:	671k	576k	692k
Adjustment to start*	21k	-23k	-
Adjusted number at start	692k	554k	692k
New members:			
New entrants	219k	-	102k
Re-employed members	17k	-	-
New dependants	-		25k
Movements between categories:			
Net leavers from active service	-142k	142k	-
Age related retirements	-47k	-45k	-
Ill-health retirements	-2k	-1k	-
Cessations with no ongoing liability:			
Other exits	-10k	-5k	-9k
Deaths	-1k	-4k	-58k
Dependant deaths	-	-	-14k
Number expected at end of period:	726k	641k	738k
Valuation data at end of period:	721k	645k	739k
Difference:	-5k	4k	1k

The number at the start of the period is prior to adjustments made as part of 2016 valuation for the impact of members who would be classified as deferred based on the information provided by employers, but who are in fact active members (see GAD's 2016 valuation data report for more details).

* The adjustments reflect information provided by employers to the scheme administrator after the 2016 valuation data was provided to GAD.

Appendix C

Checks, adjustments and uncertainties



Checking and adjustment process



1. Data received

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.

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 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.

Top 3 reasons for excluding records*

161	Deferred pension was unreasonable or missing (not rated up)
134	Full-time pay outside reasonable range (rated up)
115	Pension was unreasonable or missing (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

188 Actives excluded ~0.0% of total records	164 Deferreds excluded ~0.0% of total records	126 Pensioners excluded ~0.0% of total records
No change vs. the ~0% 2016 exclusion	Improvement vs. the 0.4% 2016 exclusion	No change vs. the ~0% 2016 exclusion

Overall ~0.0% of total records were excluded (improvement compared with the 0.1% excluded in 2016).

Further information

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

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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 resource 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.

Here are some examples of the key adjustments we have made for TPS:

Actives:

- Extracting Active members from the 'non-pensioners' dataset (where 'leaver indicator' is equal to N and 'date of last service' is on or after 31 March 2020, or if 'in service on 30 April 2020' indicator is yes).
- Creating a new field called Actual Salary based on Annual Pensionable Salary (NPA60 and NPA65 sections) or Annual Pensionable Earnings (2015 section), depending on each member's Protection Status.
- Adjusting the Actual Salary to be the maximum of the two salary fields mentioned above where it would otherwise be zero or missing.
- Updated members' protection status to Unprotected from Protected/Tapered if they have CARE pension greater than zero, and no NPA 60 or NPA 65 service.

Deferreds:

- Extracting Deferreds from the 'non-pensioners' dataset (where 'leaver indicator' is equal to Y or 'date of last service' is before 31 March 2020, unless 'in service on 30 April 2020' indicator is yes).

Pensioners:

- Reassigning members with an unknown Pension Group to Normal Health /Ill-Health/Dependants depending on age at valuation date and whether there was a prospective spouse pension in the data.
- Reassigning any children aged over 25 to dependants.
- Reassigning any members aged under 18 to children.

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 $\pm 0.25\%$ 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 TPS valuation.

Appendix D

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.

Note that all active members accrue benefits in the 2015 section from 1 April 2022.

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

As at 31 March 2020

Number of members (000's)

Section	Males	Females	Total
NPA 60	81	208	289
	-28	-61	-88
NPA 65	64	162	225
	-16	-35	-51
Mixed Service	2	12	14
	-2	-6	-8
2015	58	135	193
	+42	+99	+141
All sections	205	517	721
	-3	-2	-5

Average age* (years)

Section	Males	Females	Total
NPA 60	49.4	48.4	48.7
	+1.6	+1.6	+1.6
NPA 65	39.6	38.1	38.5
	+2.8	+3.5	+3.3
Mixed Service	51.3	50.1	50.3
	+2.9	+3.1	+3.0
2015	34.7	32.3	33.0
	+2.0	+2.5	+2.3
All sections	43.6	41.9	42.4
	-0.2	+0.0	-0.1

* Weighted by actual pay

The first number in each section, in bold text, shows the value 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

As at 31 March 2020

Total full-time equivalent pay (£m pa)

Section	Males	Females	Total
NPA 60	4,168 -19.1%	9,580 -16.4%	13,749 -17.2%
NPA 65	2,722 -0.8%	6,546 +1.8%	9,268 +1.0%
Mixed Service	95 -38.4%	477 -26.5%	572 -28.8%
2015	- -	- -	- -
All sections	6,985 -13.3%	16,604 -10.4%	23,589 -11.3%

Total actual pay (£m pa)

Section	Males	Females	Total
NPA 60	3,909 -19.4%	8,085 -16.2%	11,994 -17.3%
NPA 65	2,493 +4.7%	5,531 +0.8%	8,023 +2.0%
Mixed Service	78 -35.7%	353 -20.7%	432 -23.9%
2015	1,510 +377.1%	3,511 +385.7%	5,021 +383.1%
All sections	7,990 +4.2%	17,480 +7.2%	25,470 +6.2%

Note: Full-time equivalent pay is only provided in respect of final salary members (final salary members are NPA60, NPA65 or Mixed Service members)

Summary statistics – actives

As at 31 March 2020

Average full-time equivalent pay (£ pa)*

Section	Males	Females	Total
NPA 60	51,316 +8.2%	46,014 +7.9%	47,502 +7.9%
NPA 65	42,753 +24.0%	40,475 +23.6%	41,118 +23.7%
Mixed Service	45,732 +12.6%	41,236 +11.9%	41,919 +11.7%
2015	- -	- -	- -
All sections	47,528 +13.4%	43,521 +13.4%	44,635 +13.3%

Average actual pay (£ pa)

Section	Males	Females	Total
NPA 60	48,118 +7.9%	38,833 +8.1%	41,439 +7.8%
NPA 65	39,150 +30.9%	34,196 +22.3%	35,595 +24.8%
Mixed Service	37,832 +17.5%	30,493 +20.7%	31,608 +19.3%
2015	26,132 +31.3%	26,004 +29.5%	26,042 +30.0%
All sections	39,020 +5.8%	33,841 +7.6%	35,311 +7.0%

* The average full-time equivalent pay is calculated only for those members where the information has been provided (only in respect of members with final salary benefits)

Summary statistics – actives

As at 31 March 2020

Average reckonable service (years)*

Section	Males	Females	Total
NPA 60	15.0 -1.6	13.4 -1.2	13.8 -1.3
NPA 65	3.5 +0.2	3.4 +0.1	3.4 +0.1
Mixed Service	7.4 -0.5	7.6 -0.2	7.6 -0.2
2015	- -	- -	- -
All sections	9.9 -1.0	9.0 -0.7	9.2 -0.8

* Unweighted (shown for final salary sections only)

Total post-reform CARE pension (£m pa)#

Section	Males	Females	Total
NPA 60	280.6 + 423%	584.6 + 425%	865.2 + 424%
NPA 65	197.0 + 404%	452.1 + 390%	649.1 + 394%
Mixed Service	6.3 + 237%	28.6 + 302%	34.9 + 289%
2015	61.6 + >1000%	144.9 + >1000%	206.5 + >1000%
All sections	545.5 + 457%	1,210.2 + 454%	1,755.7 + 455%

The pension amount includes pension revaluation to April 2020.

Summary statistics – deferreds

As at 31 March 2020

Number of members (000's)

Section	Males	Females	Total
NPA 60	105 +2	244 +5	348 +6
NPA 65	66 +13	134 +28	200 +41
Mixed Service	5 +0	14 +2	19 +2
2015	27 +25	50 +46	77 +72
All sections	203 +41	441 +81	645 +122

Average age* (years)

Section	Males	Females	Total
NPA 60	54.0 +1.2	52.5 +1.4	53.0 +1.3
NPA 65	42.9 +2.4	40.9 +3.0	41.5 +2.8
Mixed Service	54.7 +2.0	52.9 +2.3	53.3 +2.2
2015	36.4 +1.4	34.2 +1.7	34.9 +1.6
All sections	51.4 0.0	49.7 +0.1	50.3 +0.1

* Weighted by pension

The first number in each section, in bold text, shows the value 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

As at 31 March 2020

Total deferred pension (£m pa)

Section	Males	Females	Total
NPA 60	365 +17.4%	746 +18.3%	1,111 +18.0%
NPA 65	93 +133.5%	205 +139.3%	299 +137.4%
Mixed Service	11 +32.2%	36 +38.8%	47 +37.2%
2015	12 +>1000%	24 +>1000%	37 +>1000%
All sections	481 +34.0%	1,012 +36.2%	1,493 +35.5%

Average deferred pension (£ pa)

Section	Males	Females	Total
NPA 60	3,488 +15.4%	3,060 +16.1%	3,189 +15.8%
NPA 65	1,402 +86.8%	1,539 +89.2%	1,493 +88.5%
Mixed Service	2,088 +21.0%	2,526 +22.5%	2,409 +22.3%
2015	447 +349.1%	491 +364.9%	475 +359.5%
All sections	2,365 +7.0%	2,293 +11.3%	2,316 +10.0%

Pension amounts include the April 2020 pension increase

Summary statistics – pensioners

As at 31 March 2020

Number of members (000's)

Type	Males	Females	Total
Normal health	208 +10	389 +38	597 +48
Ill-health	25 -3	43 -3	68 -6
Dependant	18 +4	53 +2	71 +5
Child	2 ~0	2 ~0	3 ~0
All sections	253 +11	486 +37	739 +47

~ Means the figure is too small to report

Average age* (years)

Type	Males	Females	Total
Normal health	72.6 +1.5	71.6 +1.3	72.0 +1.4
Ill-health	73.4 +2.9	73.9 +2.6	73.7 +2.8
Dependant	71.1 +1.9	77.3 +0.8	76.2 +0.8
Child	15.7 -0.6	15.5 +0.0	15.6 -0.3
All sections	72.6 +1.7	72.1 +1.4	72.3 +1.5

* Weighted by pension

The first number in each section, in bold text, shows the value 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

As at 31 March 2020

Total pension (£m pa)

Type	Males	Females	Total
Normal health	3,374 +11.7%	4,526 +20.1%	7,900 +16.4%
Ill-health	416 -2.1%	558 +1.0%	974 -0.3%
Dependant	70 +49.4%	327 +22.6%	397 +26.6%
Child	5 +10.1%	5 +20.7%	10 +15.4%
All sections	3,865 +10.5%	5,416 +18.0%	9,280 +14.7%

Average pension (£ pa)

Type	Males	Females	Total
Normal health	16,207 +6.4%	11,640 +8.4%	13,232 +7.0%
Ill-health	16,566 +8.1%	12,918 +8.3%	14,260 +8.1%
Dependant	3,901 +19.3%	6,192 +18.5%	5,612 +17.0%
Child	3,058 +11.1%	3,165 +15.7%	3,112 +13.5%
All sections	15,292 +5.8%	11,135 +9.1%	12,557 +7.4%

Pension amounts include the April 2020 pension increase

Appendix E

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 <u>reformed section</u> (referred to as the 2015 section in this report).
Cost cap cost	A way of measuring the cost of benefits being provided from the 2015 section of the scheme, which is then compared to a 'target cost'. The TPS target cost is set at 10.9% of pay. If the results of the valuation show that the <u>cost cap cost</u> 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 section (e.g. to the benefits provided) to bring the <u>cost cap cost</u> back to the target cost.
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 several times 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 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.

Glossary 2

<p>Normal pension age</p>	<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 Service could have a normal pension age of 60 (NPA 60 section) or 65 (NPA 65 section). • State Pension Age ('SPA') (i.e. currently ages 65 to 68 depending on date of birth) for the reformed scheme benefits (2015 section).
<p>Pension increase</p>	<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>
<p>Pension revaluation</p>	<p>The rate at which the <u>CARE</u> pension is revalued each year a member is an active member.</p>
<p>Professional actuarial requirements</p>	<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 section in this report). All non-reformed sections are known as legacy sections. This terminology is used in the <u>McCloud</u> 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 <u>legacy section</u> . Members who have reformed benefits only will be categorised under the <u>reformed section</u> .