



Government Actuary's Department

Principal Civil Service Pension Scheme

Actuarial valuation as at 31 March 2012
Report on membership data

Date: 14 July 2014
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1 Introduction

- 1.1 This report is addressed to the Cabinet Office. It is also being made available to the Principal Civil Service Pension Scheme ('PCSPS' or 'the Scheme') Governance Group as part of the consultation process relating to the actuarial valuation of the Scheme, which is being carried out as at 31 March 2012. This report should not be reproduced or disseminated to other parties without prior consent. The Government Actuary's Department (GAD) does not accept any liability to third parties, whether or not it has agreed to the disclosure.
- 1.2 This report discusses and summarises the membership data provided to GAD to be used by GAD for the purposes of the actuarial valuation as at 31 March 2012. It also sets out the checks that GAD has undertaken on this data.
- 1.3 The results of the valuation will be critically dependent on the quality and correctness of the data used. The purpose of this document is to ensure that users of the valuation report understand the issues relating to the data used. In particular, those issues that may have a material impact on the valuation result are discussed.
- 1.4 Experience data used to inform the assumptions appropriate for the valuation are the subject of a separate report, *Principal Civil Service Pension Scheme: Valuation as at 31 March 2012: Report on data used for experience analysis* draft report dated 18 September 2013¹.
- 1.5 All member data and supplementary accounting information provided and discussed in this report were supplied by the Cabinet Office and the Scheme administrators (MyCSP and Capita). MyCSP provided the active member extract and Capita provided the extract for deferred members and current beneficiaries (pensioner and dependant members). Annual accounts for the relevant period are publicly available.
- 1.6 In preparing this report, GAD has relied on data and other information supplied by the Cabinet Office and the Scheme administrators as described in the report. Any checks that GAD has made on this data and information are limited to those described in the report, including any checks on the overall reasonableness and consistency of the data. These checks do not represent a full independent audit of the data supplied and do not by themselves confirm or guarantee the overall quality or correctness of the data. In particular, GAD has relied on the general completeness and accuracy of the information supplied without independent verification.
- 1.7 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.

¹ The final version of the experience data report has been dated 14 July 2014.



2 Description of data provided

Individual member data

- 2.1 Individual member data was supplied for all active members, deferred members and current beneficiaries of the Scheme. We received data in respect of the membership classes set out in Table 2.1.

Table 2.1: Individual data supplied

Member Class	Description
Actives	Current employees earning benefits
Deferred pensioners	Ex-employees who retain benefits in the Scheme but who have not yet retired
Current pensioners and dependents	Members and dependents receiving pensions from the Scheme
Commutation statistics (not trivial commutation)	Information on how much pension was commuted for retirement lump sum relating to new pensioners since 31 March 2007
Active salary data	Salary information for members who were active throughout the inter-valuation period (ie from 1 April 2007 to 31 March 2012)
Active pension debits	Notional pensions that are deducted from members' benefits as a consequence of a Pension Sharing Order on divorce for active members in Classic, Classic Plus and Premium

- 2.2 Sections 4, 5 and 6 of this report consider the treatment of active, deferred and pensioner/dependant membership data respectively. For each category of membership the data was initially analysed and, in some cases, a number of records were removed (eg duplicate records or records for schemes not under scope for the valuation).



- 2.3 Further analysis was undertaken and relevant adjustments applied. A number of records were then removed, as they were incomplete or the data provided looked incorrect. Where records were excluded, an uprating factor has been applied to the included data to provide a final dataset incorporating the same number of records as the original extract (after duplicate/out of scope records had been removed).
- 2.4 Uprating data in this way implicitly assumes that excluded members have the same average profile (ie age, sex, pay, service, pension etc) as included records. If the missing members have the same characteristics on average as the members we do have data for, then our rate up method introduces very little error into the calculation of the contribution rate and the employer cost cap but this may not be the case. To mitigate against this risk the uprating factors were applied to homogeneous groups of data to ensure that no bias was created towards a particular Scheme section, salary band, retirement type or gender with the exclusions.
- 2.5 The uprated data was then further grouped for the purposes of calculating liabilities and future costs of the Scheme, this is explained further in Section 7.
- 2.6 This is the first valuation to take account of members of the Nuvos section which was introduced for new joiners from 30 July 2007. The data shows there were some 82,500 active members of that section as at 31 March 2012.
- 2.7 The data items provided for each member are set out in Appendix A. The data items provided for the experience analysis are also set in this Appendix.

Accounting information

- 2.8 Published accounts were available for the full inter-valuation period. These include summaries of the Scheme's membership as at the end of each accounting period as summarised in Section 3. The accounts do not include summaries of the Scheme's membership movements for each accounting period. Certain pieces of financial information from the accounts are used to perform independent checks on the valuation data as explained in Sections 4 to 6.

Benefit information

- 2.9 A summary of the benefits provided to members of the Scheme is shown in Appendix E. The benefits provided in the existing sections of the Scheme are set out in the Rules of the PCSPS. The benefits provided in the 2015 Scheme are set out in *The [draft] Public Service (Civil Servants and Others) Pensions Regulations 2014*.
- 2.10 The only uncertainties that we are aware of about the form of benefits that the Scheme is liable to provide is the potential requirement for sex equalisation of Guaranteed Minimum Pensions (GMPs) and the potential requirement for the equalisation of contingent partner's pensions. The benefits being valued for the valuation are those applicable at 31 March 2012 (or to be introduced on 1 April 2015 for the 2015 Scheme) and we have not made any allowance for potential future changes in these or other areas.



3 Reconciliation of membership

- 3.1 This section summarises how the numbers of members has changed since the last completed valuation of the Scheme (carried out as at 31 March 2007).
- 3.2 The valuation data figures after 1 April 2007 are based on the experience data received for the valuation as at 31 March 2012. The experience data used to inform the assumptions appropriate for the valuation are the subject of a separate draft report, *Principal Civil Service Pension Scheme: Valuation as at 31 March 2012: Report on data used for experience analysis* dated 18 September 2013².
- 3.3 The reconciliation shows both the movements as provided in the valuation data and the corresponding information provided in the Annual Accounts.

Table 3.1: Reconciliation of membership 31 March 2007 to 31 March 2012

000's	Actives		Deferreds		Pensioners	
	Valuation data	Accounts	Valuation data	Accounts	Valuation data	Accounts
Number at 31/3/07	638,448	594,000	328,869	316,000	555,367	569,000
Additions	105,746	<u>Not available</u>	<u>Not available</u>	<u>Not available</u>	159,158	<u>Not available</u>
Deductions	<u>(249,438)</u>	<u>Not available</u>	<u>Not available</u>	<u>Not available</u>	<u>(114,107)</u>	<u>Not available</u>
Number expected at 31/3/12	494,756	<u>Not available</u>	<u>Not available</u>	<u>Not available</u>	600,418	<u>Not available</u>
Data at 2012	532,354	523,000	376,840	365,000	610,000	622,000

- 3.4 The figures in Table 3.1 exclude members of the Partnership Pension Scheme.
- 3.5 The table above shows there are some discrepancies between the figures in the accounts compared to the valuation data. This is expected to be partly attributable to the acknowledged difficulty in providing accurate figures shortly after the 'as at' date for accounts purposes. Additionally, we have not been able to recreate the membership data as at 31 March 2012 (number expected as at 31 March 2012 by allowing for movements in the data since 31 March 2007) as closely as we would have liked to the actual dataset.

² The final version of the experience data report has been dated 14 July 2014.



Active members

- 3.6 It should be noted that the information on membership movements between 1 April 2007 and 31 March 2012 (the 'inter-valuation period') included members who had multiple exits in the inter-valuation period. In constructing the membership reconciliation table above we have had regard only to the first exit. Some members had more than one exit occurring on the same date in the data extract. We have assumed that the reason of exit was in the following order: death, normal retirement, ill health then voluntary exit. That is, if a member had exits occurring on the same date which were death, ill health and voluntary exit then we assumed the member's exit was by death.
- 3.7 The number of active member additions over the period 1 April 2007 to 31 March 2012 will be understated. The valuation extract provided information on all active member leavers between 1 April 2007 and 31 March 2012 but did not provide information on all new active member joiners after 1 April 2007. We have only been able to identify new joiners after 1 April 2007 as long as they are in the active membership as at 31 March 2012 or were rejoiners after 1 April 2007 who subsequently left before 31 March 2012. That is, the data extract does not allow us to identify the new members who joined after 1 April 2007 who subsequently left before 31 March 2012.
- 3.8 We would expect most of the new joiners, and subsequent leavers in the inter-valuation period, to have left on withdrawal. There were around 190,000 exits listed as withdrawals or early retirements over the inter-valuation period. Moreover, there were around 27,000 withdrawals in the inter-valuation period for members aged 25 or less at date of exit, of which most would have more than likely joined after 31 March 2007. It does not seem unreasonable to assume that around 30,000 exits (ie around 15% of total leavers over the inter-valuation period) are as a result of members who joined since 2007 and who are therefore included in the deductions but not the additions for actives in Table 3.1 above. Including these extra additions to the active data in Table 3.1 would largely account for the difference in the expected and actual active membership numbers as at 31 March 2012.
- 3.9 The active membership data as at 31 March 2012 included over 10,000 members who are recorded as having left the payroll but do not appear in any other member category. Having discussed with MyCSP we understand these may be due to late notifications from the relevant employer (ie they may have changed employer but still be recorded as an active member in the Scheme). We have treated these members as active members but they may be recorded differently in the Annual Accounts.

Deferred members

- 3.10 We do not have sufficient information to reconcile membership over the inter-valuation period in respect of deferred members. The extract in respect of deferred members provided death exits only and it did not provide information regarding other reasons of exit (eg retirements, transfers out or contribution refunds).
- 3.11 The P Status deferred members (see paragraph 5.20) may be treated differently in the Annual Accounts than the approach we took for the valuation.



Pensioner and dependant members

- 3.12 For individuals with pensions in payment, the data provided death exits only over the inter-valuation period. This has been used in Table 3.1 above. New pensions in payment consist of those which came into payment since 1 April 2007 and (i) were still in payment as at 31 March 2012 or (ii) whose recipients had died in the period between 1 April 2007 and 31 March 2012. Death is normally the only type of exit possible for pensioner members so the reconciliation between estimated and actual membership should be reasonably close. However, for dependants we cannot identify pensions that cease due to remarriage. This will understate dependant member exits. In addition, child dependant members may automatically exit the dependant membership as a result of reaching a certain age (eg no longer in full time education at age 21 or 23 years). The data extract does not provide information to identify these exits.



4 Active member data

4.1 This section summarises the data provided for active members for the purposes of this valuation. It also summarises the checks and adjustments we have made to the active member data and shows summary statistics about the data following implementation of the required data adjustments.

4.2 The active member data used will help determine the past service liability, the contribution rate payable from 2015 and the employer cost cap.

A. Summary of active data

4.3 MyCSP provided an active member dataset on 7 January 2013. Having conducted initial checks on this data it was agreed that the dataset did not include all active members as at 31 March 2012. Having discussed with MyCSP it was concluded that data from some of the Pensions Service Centres had not been provided and so a new dataset would be provided. In order to ensure that data checking could proceed as quickly as possible it was agreed that data would be resubmitted in batches as and when the data became available from the PSCs. Revised active member data was therefore provided during February and March 2013.

4.4 Under the terms of the reforms being made to public service pension schemes from 2015 members within a certain period prior to their current normal pension age (NPA) will remain in their existing schemes until retirement. These members are termed 'Protected Members'. Members just outside this age range will transfer to the 2015 schemes between 1 April 2015 and 28 February 2022. These members are termed 'Tapered Members'. The detail of those covered by Protection and Tapering is set out in Appendix C. All other members are termed 'Unprotected Members'. Since the benefits to be provided for members after 1 April 2015 will depend on which group they fall within we have identified those members within each group. All Pre-Fresh Start prison officers are treated as Protected Members – which have been included in the Classic member summary as well as summarised separately below.

4.5 The data provided and falling within the groups identified above (after all data adjustments as discussed further below in Sections C and D) is summarised in the tables below. Overall, 98.6% of active records provided (after initial analysis concluded and records removed) were used to generate the final dataset to be used for the 2012 valuation.



Summarised active data split by Scheme section and status in 2015 Scheme

Table 4.1: Classic Members (including pre-Fresh Start prison officers)

Protection	Gender	Number of members	Total Salary (£m) (i)	Average age (years) (ii)	Average service (years) (ii)
Protected	Male	63,323	2,056.3	56.3	24.9
	Female	65,132	1,701.1	55.6	21.2
	Total	128,455	3,757.4	56.0	23.2
Tapered	Male	20,526	677.8	48.3	23.5
	Female	26,441	726.0	48.2	21.5
	Total	46,967	1,403.9	48.2	22.4
Unprotected	Male	50,951	1,542.1	40.5	17.0
	Female	73,463	1,932.3	39.9	15.2
	Total	124,414	3,474.4	40.2	16.0
All Classic members	Male	134,800	4,276.3	49.3	21.8
	Female	165,036	4,359.4	47.4	18.6
	Total	299,836	8,635.7	48.4	20.2

(i) Full-time equivalent pay

(ii) Weighted by full-time equivalent pay

Table 4.2: Classic Plus Members

Protection	Gender	Number of members	Total Salary (£m) (i)	Average age (years) (ii)	Average service (years) (ii)
Protected	Male	2,823	105.6	56.5	23.7
	Female	2,085	64.2	55.0	21.4
	Total	4,908	169.8	55.9	22.8
Tapered	Male	949	34.5	48.3	22.4
	Female	1,076	34.5	48.2	19.9
	Total	2,025	69.0	48.2	21.2
Unprotected	Male	2,594	87.2	40.9	16.2
	Female	3,649	110.7	40.4	14.8
	Total	6,243	198.0	40.6	15.4
All Classic Plus members	Male	6,365	227.4	49.2	20.6
	Female	6,810	209.4	46.2	17.7
	Total	13,175	436.8	47.8	19.2

(i) Full-time equivalent pay

(ii) Weighted by full-time equivalent pay



Table 4.3: Premium Members

Protection	Gender	Number of members	Total Salary (£m) (i)	Average age (years) (ii)	Average service (years) (ii)
Protected	Male	20,569	630.5	56.9	12.8
	Female	16,057	401.0	55.6	10.8
	Total	36,626	1,031.5	56.4	12.0
Tapered	Male	5,989	191.1	48.2	12.0
	Female	6,662	175.9	48.2	10.4
	Total	12,651	367.0	48.2	11.2
Unprotected	Male	38,772	1,116.3	36.0	8.3
	Female	48,773	1,297.0	35.5	7.5
	Total	87,545	2,413.3	35.7	7.9
All Premium members	Male	65,330	1,937.9	44.0	10.1
	Female	71,492	1,874.0	41.0	8.5
	Total	136,822	3,811.9	42.5	9.3

(i) Full-time equivalent pay

(ii) Weighted by full-time equivalent pay

Table 4.4: Nuvos Members

Protection	Gender	Number of members	Total Salary (£m) (i)	Average age (years) (ii)	Average service (years) (ii)
Protected	Male	4,951	131.2	59.3	3.8
	Female	2,547	58.2	58.6	4.2
	Total	7,498	189.4	59.1	3.9
Tapered	Male	2,625	79.6	53.2	3.6
	Female	2,164	50.8	53.2	3.8
	Total	4,789	130.4	53.2	3.7
Unprotected	Male	33,037	855.2	34.6	3.1
	Female	37,197	899.1	33.9	3.1
	Total	70,234	1,754.4	34.3	3.1
All Nuvos members	Male	40,613	1,066.0	39.1	3.2
	Female	41,908	1,008.1	36.3	3.2
	Total	82,521	2,074.1	37.7	3.2

(i) Full-time equivalent pay

(ii) Weighted by full-time equivalent pay

Table 4.5: pre-Fresh Start Prison Officers (included in Classic Members table above)

	Gender	Number of members	Total Salary (£m) (i)	Average age (years) (ii)	Average service (years) (ii)
All Prison Officers	Male	2,720	86.1	54.4	23.8
	Female	200	6.4	51.9	28.9
	Total	2,920	92.6	54.2	24.1

(i) Full-time equivalent pay

(ii) Weighted by full-time equivalent pay



Table 4.6: All members

Gender	Number of members	Total Salary (£m) (i)	Average age (years) (ii)	Average service (years) (ii)
Male	247,108	7,507.5	46.5	16.1
Female	285,246	7,451.0	44.3	13.9
Total	532,354	14,958.5	45.4	15.0

(i) Full-time equivalent pay

(ii) Weighted by full-time equivalent pay

Table D1 in Appendix D compares the active member data as at 31 March 2012 with that as at 31 March 2007, the date of the last completed valuation.

B. Checks applied to active member data

- 4.6 All data provided was checked against the specification requested for both completeness and consistency.
- 4.7 We have conducted the following checks on the revised active member dataset provided during February and March 2013:
- > Comparison of the data provided with the membership statistics published in the 2011/12 Accounts and against the dataset provided on 7 January 2013.
 - > Checks to ensure that the data are internally consistent. For example, that service in the 80ths section and/or 60ths section of the Scheme is consistent with the membership section of the Scheme, date of birth consistent with date of joining the Scheme, amount of Scheme service consistent with date of joining etc.
 - > Checks that all members shown as active were in pensionable service as at 31 March 2012 and allocated to an appropriate section of the Scheme.
 - > General validation checks – eg consider duplicate member records, blank, nil or negative entries, looking at maximum and minimum figures (whether the figures were within a reasonable range).
- 4.8 Overall, the data did not appear to be unreasonable. We discovered some items of data were missing and some inconsistencies for which the data was adjusted as outlined in Sections C and D below. We do not have data (in respect of each individual member) from a previous valuation to make direct comparisons with and therefore all of our checks relate to the reasonableness of the data as at 31 March 2012 only.



- 4.9 The dataset was also compared against a summary of the previous valuation dataset as at 31 March 2007 as outlined in the published valuation report dated 7 December 2007 to ensure that there were no unrealistic changes over the periods. For example, we compared the number of members, average age, average service and total payroll for each section. From these checks no significant errors were found with the data provided.
- 4.10 The dataset was then subjected to an independent check using accounting data. The total pensionable payroll in the data was compared against contribution payments recorded in the Annual Accounts. The conclusions arising from this checking process are explained below.
- 4.11 The total pensionable pay of the active data as at 31 March 2012 amounts to £14.03 bn (or £14.96 bn for full-time equivalent). From accounting data the payroll can be estimated from the level of contributions reported in the Annual Accounts for 2011/12. Employer contributions reported in the 2011/12 Annual Accounts amounted to £2.60 bn. As employer contributions were payable at an average rate of 18.9% of pensionable pay an estimate of the pensionable payroll for 2011/12 is £13.76 bn (estimated payroll = contributions / 0.189). Given that we expect most active members would have been subject to pay freeze in 2011/12, the payroll over 2011/12 is likely to be a reasonable estimate of the rate of pay as at 31 March 2012.
- 4.12 The pensionable pay from the data is slightly higher (2%) than that implied from the employer contributions paid. There are a number of other reasons why the two figures will differ as outlined below.
- > Employer contributions may miss out late notifications from employers so that the payroll is understated
 - > The pensionable pay as at 31 March 2012 may be overstated. The active membership data as at 31 March 2012 includes the 10,000 members who are recorded as having left the payroll but do not appear in any other member category (as per Section 3.9). If we assumed that all 10,000 members did leave the Scheme mid way in 2011-12, then from the data the implied payroll would be around £13.84 bn or 0.6% higher than implied from the employer contributions paid.
 - > Members in receipt of sick pay and maternity pay also potentially distort the contribution based pay figure in any particular period as the full contributions due may not be identified until after the accounts have been closed.
 - > The valuation pay figure is based on members of the Scheme as at 31 March 2012, including an annualised figure for those who commenced membership after 1 April 2011. The employer contributions are based on the actual active membership of the Scheme over the course of the year, a proportion of whom will have left before 31 March 2012. The payroll numbers will differ to the extent that the salaries of those who left were not the same as those who replaced them and to the extent that the total number of members changed over the course of the year.



C. Adjustments made to the active member data

- 4.13 MyCSP provided a revised active member dataset covering 540,107 individual records as at 31 March 2012.

Initial analysis

- 4.14 From this dataset a number of records were excluded, as explained below, to give a revised dataset of 532,354 records.
- 4.15 Partnership: 4,562 records were excluded as they were in respect of the Partnership Pension Scheme which is not within the scope of the actuarial valuation at 2012.
- 4.16 Duplicate records: There were 553 active members each with a second record in the dataset. The majority of these records were genuine duplicates or have blank (or nil) salaries or service and hence should not be included in the data. We excluded the 1,106 records and then uprated the dataset by 549 records. 4 members were not uprated as they were in the Partnership Pension Scheme or did not have information on salary, service, or accrued Nuvos pension (ie from the data provided it is most likely there is no Scheme liability attached to those records).
- 4.17 Scheme section: 4,609 members had blank Scheme section. Members were allocated to an appropriate Scheme section based on whether there is service in the 80th section and/or 60th section or if there is data in the Nuvos pension data field. Having allocated members this way there remained 2,634 members where there is no information on salary, service or accrued Nuvos pension. These members were excluded from the dataset as it is most likely there is no Scheme liability attached to those records.
- 4.18 Leavers within active data: For the 10,000 members who are recorded as having left the active payroll but do not appear in any other member category the data provided included the relevant information as at the date the member is expected to have left service. Given the uncertainty over the current status of these members, they have been valued as if they are still active members.

Further analysis

- 4.19 The following paragraphs note relevant issues, and the actions taken, in respect of the active membership data.
- 4.20 GMP: GMP data was provided for around 160,000 active members. Given that the majority of active members are below GMP payment age it is possible that the GMPs have not been provided by the National Insurance Contributions Office (NICO) but instead relate to a transfer-in to the PCSPS from another pension scheme. Individual member GMP data was not directly used when calculating the Scheme liabilities and future costs. Instead an adjustment was made to reflect the impact of GMP receiving lower pension increases in payment than the remaining 'excess' pension. Further details on the treatment of GMP can be found in our [draft] report *Principal Civil Service Pension Scheme Valuation as at 31 March 2012: Report on methodology*



dated 16 January 2014³.

- 4.21 Part timers: The part time proportion indicated in the data was applied to full-time pensionable pay to determine actual pay. Actual pay was used to determine future service benefits. There were some members where part time proportion (proportion of part-time hours to full time equivalent) was bigger than 100% or smaller than 0%. For these cases the part-time proportion was set to 100 or 0% respectively.
- 4.22 Nuvos pension: MyCSP confirmed that the Nuvos pension accrued as at 31 March 2012 (before April 2012 pension increase) was provided in the dataset under the data field NUVPEN not NUVPENR.
- 4.23 Family benefits data: Family benefits service data item used to determine contingent spouse benefits for Classic section members. The Family benefits service data was filtered to remove unreliable data and grouped at same level as other data so individual percentages will be applicable to the grouped data (see Table 4.7 below).

D. Uprating

- 4.24 The revised dataset of 532,354 records was split into groups by Scheme section, salary band (see Appendix B) and gender. 7,688 records that contained data that was determined to be missing or questionable were excluded to leave 524,666 included members.
- 4.25 Active records with the following errors were excluded:
- > Salary is nil or negative
 - > Date of birth is missing or the member was aged 100 or more at the valuation date
 - > Age at date of joining Scheme is less than 16 years
 - > Nuvos service is negative.
- 4.26 The excluded 7,688 records were then 'replaced' with an equal number of records that have the same age/salary/service profile as the remainder of the dataset. This was done by 'uprating' the 524,666 included members in line with the ratio of original members (included and excluded members) to included members to get back to 532,354 total records. Each valuation group was uprated separately, to ensure that no bias is created towards a particular Scheme section, salary band or gender with the exclusions.
- 4.27 The uprating factors used are listed in Table 4.7 (pre-Fresh Start prison officers are included in the Classic section).

³ The final version of the methodology report has been dated 14 July 2014.



Table 4.7: Active member data uprating factors

Section	Group	Sex	Original members	Members excluded	Included members	Uprating factor	
Classic	Salary Band 1	Male	27,930	743	27,187	1.02733	
		Female	63,524	1,217	62,307	1.01952	
	Salary Band 2	Male	85,850	260	85,590	1.00304	
		Female	90,571	302	90,269	1.00335	
	Salary Band 3	Male	16,545	44	16,501	1.00267	
		Female	9,974	24	9,950	1.00241	
	Salary Band 4	Male	1,755	9	1,746	1.00487	
		Female	767	2	765	1.00261	
	Prison Officers	Male	2,720	47	2,673	1.01758	
		Female	200	5	195	1.02564	
	All Classic			299,836	2,652	297,183	1.00892
Classic Plus (CP)	Salary Band 1	Male	1,110	6	1,104	1.00543	
		Female	1,938	10	1,928	1.00519	
	Salary Band 2	Male	3,793	4	3,789	1.00106	
		Female	3,886	9	3,877	1.00232	
	Salary Band 3	Male	1,297	1	1,296	1.00077	
		Female	900	1	899	1.00111	
	Salary Band 4	Male	165	0	165	1.00000	
		Female	86	1	85	1.01176	
	All CP			13,175	32	13,143	1.00243
	Premium	Salary Band 1	Male	20,817	326	20,491	1.01593
Female			33,749	544	33,205	1.01638	
Salary Band 2		Male	36,265	119	36,146	1.00331	
		Female	31,619	142	31,477	1.00453	
Salary Band 3		Male	7,280	28	7,252	1.00386	
		Female	5,680	16	5,664	1.00282	
Salary Band 4		Male	968	7	961	1.00728	
		Female	444	1	443	1.00226	
All Premium				136,822	1,184	135,639	1.00873
Nuvos		Salary Band 1	Male	18,559	1,653	16,906	1.09775
	Female		23,712	1,951	21,761	1.08966	
	Salary Band 2	Male	18,652	90	18,562	1.00485	
		Female	15,543	103	15,440	1.00667	
	Salary Band 3	Male	2,861	11	2,850	1.00386	
		Female	2,392	7	2,385	1.00294	
	Salary Band 4	Male	541	3	538	1.00558	
		Female	261	2	259	1.00772	
	All Nuvos			82,521	3,820	78,701	1.04854
	All			532,354	7,688	524,666	1.01465



E. Final dataset

4.28 The final dataset as at 31 March 2012 covering 532,354 members is summarised in paragraph 4.5 (Tables 4.1 to 4.6) and in the following tables (pre-Fresh Start prison officers are included in the Classic section). Overall, 98.6% of active records provided (after duplicate records removed) were used to generate the final dataset to be used for the 2012 valuation.

Table 4.8: Active member final data summary

Section	Group	Sex	Number of members	Total Salary (£m) (i)	Average age (ii)	Average service (years) (ii)	Total pension (£m pa) (iii)	
Classic	Salary Band 1	Male	27,930	517.9	48.7	16.9	109.3	
		Female	63,524	1,184.7	47.5	15.3	226.5	
	Salary Band 2	Male	85,850	2,599.1	48.8	21.7	705.8	
		Female	90,571	2,550.2	47.3	19.6	625.0	
	Salary Band 3	Male	16,545	914.4	50.1	23.9	273.9	
		Female	9,974	549.6	47.3	20.2	139.0	
	Salary Band 4	Male	1,755	158.8	52.7	25.7	51.2	
		Female	767	68.5	50.8	22.8	19.6	
	Prison Officers	Male	2,720	86.1	54.4	23.8	25.6	
		Female	200	6.4	51.9	28.9	2.3	
	All Classic		299,836	8,635.7	48.4	20.2	2,178.1	
Classic Plus (CP)	Salary Band 1	Male	1,110	20.8	48.3	16.6	5.1	
		Female	1,938	36.5	46.1	14.9	8.0	
	Salary Band 2	Male	3,793	119.1	48.6	20.2	34.8	
		Female	3,886	114.6	45.8	18.1	29.9	
	Salary Band 3	Male	1,297	72.8	50.0	22.0	22.9	
		Female	900	50.5	46.4	18.2	13.4	
	Salary Band 4	Male	165	14.6	52.7	23.0	4.8	
		Female	86	7.8	50.5	21.6	2.5	
		All CP		13,175	436.8	47.8	19.2	121.5
	Premium	Salary Band 1	Male	20,817	374.9	43.5	7.6	47.5
Female			33,749	606.8	41.7	7.1	71.9	
Salary Band 2		Male	36,265	1,073.0	43.0	9.9	176.6	
		Female	31,619	919.4	39.9	8.8	134.4	
Salary Band 3		Male	7,280	399.2	45.7	12.6	84.0	
		Female	5,680	307.8	41.7	10.1	52.0	
Salary Band 4		Male	968	90.8	51.4	13.2	20.1	
		Female	444	39.9	47.8	12.0	8.1	
		All Premium		136,822	3,811.9	42.5	9.3	594.6



Section	Group	Sex	Number of members	Total Salary (£m) (i)	Average age (ii)	Average service (years) (ii)	Total pension (£m pa) (iii)
Nuvos	Salary Band 1	Male	18,559	326.4	37.5	2.8	20.0
		Female	23,712	413.6	36.2	3.0	24.8
	Salary Band 2	Male	18,652	529.8	37.7	3.2	35.9
		Female	15,543	442.3	34.9	3.2	28.4
	Salary Band 3	Male	2,861	156.5	43.3	4.1	10.6
		Female	2,392	128.3	39.8	3.9	8.4
	Salary Band 4	Male	541	53.3	49.7	3.9	3.5
		Female	261	23.9	46.9	4.8	1.7
	All Nuvos		82,521	2,074.1	37.7	3.2	133.3
All			532,354	14,958	45.4	15.0	3,027

(i) Full-time equivalent pay

(ii) Weighted by full-time equivalent pay

(iii) Includes pension increases awarded at April 2012 for Nuvos pensions.



5 Deferred member data

5.1 This section summarises the data provided for former active members of the Scheme for the purposes of this valuation. It also summarises the checks and adjustments we have made to the deferred member data and shows summary statistics about the data following implementation of the data adjustments.

5.2 The deferred member data used helped determine the PCSPS past service liability.

A. Summary of deferred member data

5.3 Capita provided a dataset covering 376,840 former active members as at 31 March 2012, on 25 January 2013 and two further data extracts on 12 March 2013 and 19 April 2012 consisting of deferred members as at 31 March 2011 and deferred members as at 31 March 2007.

5.4 The data provided (after all data adjustments as discussed further below in Sections C and D) is summarised below. Overall, 97.8% of current deferred member records provided were used to generate the final dataset to be used for the 2012 valuation.

Table 5.1: Deferred Members

Section	Gender	Number of members	Total deferred pension (i) (£m pa)	Average age (ii)
Classic	Male	138,438	579.7	53.0
	Female	177,683	545.6	50.9
	All Classic	316,121	1,125.3	52.0
Classic Plus	Male	1,976	15.7	50.7
	Female	2,930	15.7	47.7
	All Classic Plus	4,906	31.4	49.2
Premium	Male	20,434	68.3	45.7
	Female	25,843	65.8	43.5
	All Premium	46,277	134.1	44.6
Nuvos	Male	4,547	9.6	39.4
	Female	4,989	8.4	37.6
	All Nuvos	9,536	18.0	38.5
Total	Male	165,395	673.3	52.0
	Female	211,445	635.5	49.9
	Total	376,840	1,308.7	51.0

(i) Including pension increases awarded in April 2012

(ii) Weighted by pension



- 5.5 Table D2 in Appendix D compares the deferred member data as at 31 March 2012 with that as at 31 March 2007, the date of the last completed valuation.

B. Checks applied to deferred member data

- 5.6 All data provided was checked against the specification requested for both completeness and consistency.
- 5.7 Capita provided the non-active dataset on 25 January 2013. Having conducted initial checks on this data it was agreed that the dataset received contained a mixture of members whose pension included the April 2012 pension increase and members who did not. Capita provided a further data extract as at 31 December 2011 which was used to determine which members had pensions that included the April 2012 pension increase. The adjustments are described in section C below.
- 5.8 We have conducted the following checks on the data:
- > Comparison with the data provided in the membership statistics published in the 2011/12 Annual Accounts
 - > Spot checks to ensure consistency with the data as at 31 March 2007
 - > Checks to identify any blank or negative entries
 - > Validation of data entries (eg checking maximum and minimum values).
- 5.9 Overall, the data did not appear to be unreasonable. We discovered some items of data were missing and some inconsistencies for which the data was adjusted as outlined in Sections C and D below.
- 5.10 The information contained with the Annual Accounts was not sufficient to do independent checks.
- 5.11 The final dataset (after all data adjustments as discussed further below in Sections C and D) was also compared against the previous valuation dataset as at 31 March 2007. From these checks no significant errors were found with the data provided.

C. Adjustments made to the deferred member data

- 5.12 Capita provided a dataset covering 376,840 individual records as at 31 March 2012.
- 5.13 The following paragraphs note relevant issues, and the actions taken, in respect of the deferred membership data.



- 5.14 Pension increase as at April 2012: The data extract received contained a mixture of members whose pension included the April 2012 pension increase (5.2%) and members who did not. Capita provided a further data extract as at 31 December 2011 which was used to determine which members included the April 2012 pension increase. Capita confirmed that the 31 December 2011 extract would not include the April 2012 pension increase. Pensions were adjusted as appropriate to ensure that the pension amount was before the April 2012 pension increase in all cases.
- 5.15 For members at both extract dates (ie at 31 December 2011 and 31 March 2012), the pension in the December 2011 data will be the pension before the April 2012 pension increase has been applied. In order to approximately adjust the data so that all pension amounts did not allow for the April 2012 pension increase we determined average reduction factors for members at both extract dates as the ratio of the total 2011 pension over the 2012 pension. We have calculated average reduction factors for each valuation group (ie by section and gender (and retirement reason where relevant)). We have applied the relevant reduction factors to the 2012 data to give the total pension figure before the April 2012 pension increase. By applying the relevant reduction factors to the 2012 data it is implicitly assumed that any new pensions since 31 December 2011 have also been subject to the same average increase in pension in respect of those members at both December 2011 and March 2012 dates.
- 5.16 The adjusted data had the April 2012 pension increase applied to the whole dataset before further adjustments were applied.
- 5.17 GMP data: GMP data was provided for around 24,000 members. Given that the majority of deferred members are below GMP payment age it is possible that the GMPs have not been provided by NICO but instead relate to a previous transfer into the PCSPS Individual member GMP data was not directly used when calculating the Scheme liabilities and future costs. Instead an adjustment was made to reflect the impact of GMP receiving lower pension increases in payment than the remaining 'excess' pension. Further details on the treatment of GMP can be found in our [draft] report *Principal Civil Service Pension Scheme Valuation as at 31 March 2012: Report on methodology* dated 16 January 2014⁴.
- 5.18 Contingent spouse's pension: Contingent spouse's pensions provided in the data do not include increases since the member's date of leaving. We did not adjust the contingent spouse's pension data but estimated the contingent spouse's pension as 50% of the member's Classic (and Classic part of Classic Plus) pension or 37.5% of the member's Classic Plus (Premium service), Premium or Nuvos pension.
- 5.19 Members over NPA: The dataset contained over 20,000 records where members were older than their NPA at the effective date of the valuation. These members were all valued as deferred members retiring immediately and represent around 1% of the past service liability of the Scheme.

⁴ The final version of the methodology report has been dated 14 July 2014.



- 5.20 P Status members: There are around 20,000 deferred members with P status (Pensioners). The majority of these members are aged between 50 and 60 years. They do not appear in the pensioner extract. We have assumed P status members should be valued as members with preserved benefits payable from their NPA.

D. Uprating

- 5.21 From the original 376,840 individual records 8,352 records that contained data that was determined to be missing or questionable were excluded to leave 368,488 included members.
- 5.22 Deferred member records with the following errors were excluded:
- > Total pension less than or equal to zero
 - > Date of birth is missing
 - > Age at valuation effective date less than 20
- 5.23 The excluded 8,352 records were then 'replaced' with an equal number of records that have the same age/pension profile as the remainder of the dataset. This was done by 'uprating' the 368,488 included members in line with the ratio of original members (included and excluded members) to included members to get back to 376,840 total records. Each valuation group was uprated separately, to ensure that no bias is created towards a particular Scheme section or gender with the exclusions.
- 5.24 The uprating factors are listed in Table 5.2.



Table 5.2: Deferred member data uprating factors

Section	Gender	Original members	Members excluded	Included members	Uprating factor
Classic	Male	138,438	4,611	133,827	1.03445
	Female	177,683	3,695	173,988	1.02124
	All Classic	316,121	8,306	307,815	1.02698
Classic Plus (CP)	Male	1,976	0	1,976	1.00000
	Female	2,930	0	2,930	1.00000
	All CP	4,906	0	4,906	1.00000
Premium	Male	20,434	10	20,424	1.00049
	Female	25,843	20	25,823	1.00077
	All Premium	46,277	30	46,247	1.00065
Nuvos	Male	4,547	11	4,536	1.00243
	Female	4,989	5	4,984	1.00100
	All Nuvos	9,536	16	9,520	1.00168
Total	Male	165,395	4,632	160,763	1.02881
	Female	211,445	3,720	207,725	1.01791
	Total	376,840	8,352	368,488	1.02267



6 Pensioner and dependant pensioner data

6.1 This section summarises the data provided for pensioner members and dependants for the purposes of the valuation. It also summarises the checks and adjustments we have made to the pensioner and dependant member data and shows summary statistics about the data following implementation of the data adjustments.

6.2 The pensioner and dependant pensioner member data used helped determine the PCSPS past service liability.

A. Summary of pensioner and dependant data

6.3 Capita provided a dataset covering 610,000 current beneficiaries as at 31 March 2012 (including 122,806 dependant members) on 25 January 2013 and two further data extracts covering pensioners and dependant members as at 31 December 2011 on 19 April 2013.

6.4 The data provided (after all data adjustments as discussed further below in Sections C and D) is summarised below. Overall, 99.1% of current beneficiary records provided were used to generate the final dataset to be used for the 2012 valuation

Table 6.1: Pensioners

Type of pensioner	Gender	Number of members	Total pension (i) (£m pa)	Average age (ii)
Age and early retirement	Male	232,509	2,526.9	71.5
	Female	193,238	1,005.8	70.6
	Total	425,747	3,532.7	71.2
Ill-health retirement	Male	31,342	254.7	67.0
	Female	30,105	164.2	66.1
	Total	61,447	418.9	66.7
All	Male	263,851	2,781.6	71.0
	Female	223,343	1,170.0	70.0
	Total	487,194	3,951.6	70.7

(i) Including pension increases awarded in April 2012

(ii) Weighted by pension



Table 6.2: Dependants

Type of pensioner	Gender	Number of members	Total pension (i) (£m pa)	Average age (ii)
Dependants (iii)	Male	12,002	20.9	56.5
	Female	110,804	448.3	79.1
	Total	122,806	469.2	78.1

(i) Including pension increases awarded in April 2012

(ii) Weighted by pension

(iii) Including children

6.5 Table D3 in Appendix D compares the pensioner data as at 31 March 2012 with that as at 31 March 2007, the date of the last completed valuation.

B: Checks applied to pensioner and dependant member data

6.6 All data provided was checked against the specification requested for both completeness and consistency.

6.7 Capita provided the non-active dataset on 25 January 2013. Having conducted initial checks on this data it was agreed that the dataset received contained a mixture of members whose pension included the April 2012 pension increase and members who did not. Capita provided a further data extract as at 31 December 2011 which was used to determine which members had pensions that included the April 2012 pension increase. The adjustments are described in Section C below.

6.8 In addition Capita confirmed that where a member's benefits had been abated the pension in payment figure in the data extract was the sum of both the unabated pension and the amount of pension abated. We have therefore calculated the pension in payment (after abatement) and unabated pension from the data provided. The unabated pension will be valued in the Scheme liabilities given that it is not possible to determine when abatement would cease.

6.9 We have conducted the following checks on the data:

- > Comparison with the data provided in the membership statistics published in the 2011/12 Annual Accounts
- > Spot checks to ensure consistency with the data as at 31 March 2007
- > Checks to identify any blank or negative entries
- > Validation of data entries (eg checking maximum and minimum values).

6.10 Overall, the data did not appear to be unreasonable. We discovered some items of data were missing and some inconsistencies for which the data was adjusted as outlined in Sections C and D below.



- 6.11 The final dataset (after all data adjustments as discussed further below in Sections C and D) was also compared against the previous valuation dataset as at 31 March 2007 to ensure that there were no unrealistic changes over the periods. For example, we compared the number of members, average age, average service and total pension payroll for each section. From these checks no significant errors were found with the data provided.
- 6.12 The total pension in payment (including April 2012 pension increase) for pensioner and dependant data as at 31 March 2012 amounts to £4.26 bn. Removing the April 2012 pension increase of 5.2%, the pension in payment is about £4.05 bn as at 31 March 2012. From 2011/12 Annual Accounts the pension payroll amounted to £4.02 bn whereas it is around £4.23 bn for 2012/13. The average of the 2011/12 and 2013/13 pension payroll figures implies a pensions in payment figure of £4.14 bn as at 31 March 2012.
- 6.13 The pension in payment figure from the valuation data extract is around 2.9% higher than that implied from the 2011/12 and 2012/13 Accounts.
- 6.14 The valuation pensioner payroll figure is based on members of the Scheme as at 31 March 2012, including an annualised figure for those who had their pension commencing after 1 April 2011. The pension payroll figures are based on the actual pensioner and dependant membership over the course of the year, a proportion of whom will have left before 31 March 2012. The pension payroll numbers will differ to the extent that the pensions of those who left were not the same as those who replaced them and to the extent that the total number of members changed over the course of the year.
- 6.15 Other reasons why the pension payroll figure is different to the valuation data may include the approximate method used to ensure the April 2012 pension increase was applied to all members, the valuation data containing both short-term dependant pensions and unabated pensions (both of which are temporarily higher pensions) and the potential treatment of CSCS pensions in payment. More details of these issues are given in Section C below.

C: Adjustments made to the pensioner data

- 6.16 Capita provided a dataset covering 610,000 individual records as at 31 March 2012.
- 6.17 The following paragraphs note relevant issues, and the actions taken, in respect of the pensioner and dependant pensioner membership data.
- 6.18 Pension increase as at April 2012: The data extract received contained a mixture of members whose pension included the April 2012 pension increase (5.2%) and members who did not. Capita provided a further data extract as at 31 December 2011 which was used to determine which members included the April 2012 pension increase. Capita confirmed that the 31 December 2011 extract would not include the April 2012 pension increase. Pensions were adjusted as appropriate to ensure that the pension amount was before the April 2012 pension increase in all cases.



- 6.19 For members at both extract dates (ie at 31 December 2011 and 31 March 2012), the pension in the December 2011 data will be the pension before the April 2012 pension increase has been applied. In order to approximately adjust the data so that all pension amounts did not allow for the April 2012 pension increase we determined average reduction factors for members at both extract dates as the ratio of the total 2011 pension over the 2012 pension. We have calculated average reduction factors for each valuation group (ie by section and gender (and retirement reason where relevant)). We have applied the relevant reduction factors to the 2012 data to give the total pension figure before the April 2012 pension increase. By applying the relevant reduction factors to the 2012 data it is implicitly assumed that any new pensions since 31 December 2011 have also been subject to the same average increase in pension in respect of those members at both December 2011 and March 2012 dates.
- 6.20 The adjusted data had the April 2012 pension increase applied to the whole dataset before further adjustments were applied.
- 6.21 Abatement (pensioner members only): As mentioned above in paragraph 6.8 where a member had their pension abated, GAD calculated the pension in payment and the unabated pension as at 31 March 2012 but valued the unabated pension.
- 6.22 GMP data: GMP data was provided for around 300,000 pensioner and dependant members. We understand from Capita that the GMP provided in the data extract is expressed as per week. However, when the data was reviewed it was noted that a number of the member records contained GMP that was not weekly (the figures provided appeared to be annual amounts). Individual member GMP data was not directly used when calculating the Scheme liabilities and future costs. Instead an adjustment was made to reflect the impact of GMP receiving lower pension increases in payment than the remaining 'excess' pension. Further details on the treatment of GMP can be found in our [draft] report *Principal Civil Service Pension Scheme Valuation as at 31 March 2012: Report on methodology* dated 16 January 2014⁵.
- 6.23 Contingent spouse's pension: Contingent spouse's pensions provided in the data in respect of members who have retired from deferred member status did not include increases since the member's date of leaving. Based on the commutation data extract, we have estimated that spouse's pension after commutation is around 50% of the member's post commuted pension for Classic, Classic Plus, Premium and Nuvos members. On this basis, for each pensioner member, we have assumed that the contingent spouse's pension is 50% of the member's pension.

⁵ The final version of the methodology report has been dated 14 July 2014.



- 6.24 CSCS (Civil Service Compensation Scheme) status (pensioner members only): The data extract includes members who have payments from the CSCS (before the change to the CSCS in 2010). We have assumed that CSCS members aged below 60 (at the 2012 valuation effective date) should be valued as someone with preserved benefits payable from age 60 (as this is when the Scheme liability becomes payable). For members age 60 and over, it is not possible to split out the pension not related to CSCS benefits. In both cases we have assumed that the pension figure provided reflects the Scheme's liability.
- 6.25 Dependant pensions in payment: The amount of pension is the current pension in payment and therefore could be the higher short-term pension amount for new pensions. This will overstate the liability in respect of dependants in receipt of a short-term pension. It is not possible to determine the impact of this on the overall liabilities of these members and therefore the overall impact on the Scheme liabilities but it is not expected to be significant as any short-term spouse's pension in payment is only expected to be paid for a few months and the pension will therefore only be overstated for those dependant pensions arising from deaths in the last few months prior to 31 March 2012.

D: Uprating factors

- 6.26 From the original 610,000 individual records 5,693 records that contained data that was determined to be missing or questionable were excluded to leave 604,307 included members.
- 6.27 Pensioner and dependant pensioner records with the following errors were excluded:
- > Member was less than age 20 when the pension commenced (pensioner members only)
 - > Date of birth is missing
 - > Unabated pension is negative
- 6.28 The excluded 5,693 records were then 'replaced' with an equal number of records that have the same age/pension/retirement type profile as the remainder of the dataset. This was done by 'uprating' the 604,307 included members in line with the ratio of original members (included and excluded members) to included members to get back to 610,000 total records. Each valuation group was uprated separately, to ensure that no bias is created towards a particular Scheme section, retirement type or gender with the exclusions.
- 6.29 The uprating factors are listed in Table 6.3 to Table 6.6.



Table 6.3: Pensioner member data uprating factors (excluding CSCS)

Type of Pensioner	Section	Gender	Original members	Members excluded	Included members	Uprating factor
Age retirement	Classic	Male	163,843	1,280	162,563	1.00787
		Female	145,090	1,043	144,047	1.00724
		All Classic	308,933	2,323	306,610	1.00758
	Classic Plus (CP)	Male	1,554	9	1,545	1.00583
		Female	604	9	595	1.01513
		All CP	2,158	18	2,140	1.00841
	Premium	Male	7,690	156	7,534	1.02071
		Female	3,967	105	3,862	1.02719
		All Premium	11,657	261	11,396	1.02290
	Nuvos	Male	286	35	251	1.13944
		Female	85	9	76	1.11842
		All Nuvos	371	44	327	1.13456
	Total	Male	173,373	1,480	171,893	1.00861
		Female	149,746	1,166	148,580	1.00785
		Total	323,119	2,646	320,473	1.00826
Early retirement	Classic	Male	55,065	327	54,738	1.00597
		Female	40,733	335	40,398	1.00829
		All Classic	95,798	662	95,136	1.00696
	Classic Plus (CP)	Male	565	6	559	1.01073
		Female	295	4	291	1.01375
		All CP	860	10	850	1.01176
	Premium	Male	1,560	17	1,543	1.01102
		Female	1,040	20	1,020	1.01961
		All Premium	2,600	37	2,563	1.01444
	Nuvos	Male	29	1	28	1.03571
		Female	26	4	22	1.18182
		All Nuvos	55	5	50	1.10000
	Total	Male	57,219	351	56,868	1.00617
		Female	42,094	363	41,731	1.00870
		Total	99,313	714	98,599	1.00724



Type of Pensioner	Section	Gender	Original members	Members excluded	Included members	Uprating factor
III health retirement	Classic	Male	30,464	112	30,352	1.00369
		Female	29,571	157	29,414	1.00534
		All Classic	60,035	269	59,766	1.00450
	Classic Plus (CP)	Male	101	3	98	1.03061
		Female	77	0	77	1.00000
		All CP	178	3	175	1.01714
	Premium	Male	412	9	403	1.02233
		Female	295	9	286	1.03147
		All Premium	707	18	689	1.02612
	Nuvos	Male	18	1	17	1.05882
		Female	8	1	7	1.14286
		All Nuvos	26	2	24	1.08333
	Total	Male	30,995	125	30,870	1.00405
		Female	29,951	167	29,784	1.00561
		Total	60,946	292	60,654	1.00481
All pensioners excluding CSCS			483,378	3,652	479,726	1.00761

Table 6.4: Pensioner member data uprating factors (CSCS above 60)

Type of Pensioner	Section	Gender	Original members	Members excluded	Included members	Uprating factor
Age retirement	Classic	Male	219	13	206	1.06311
		Female	202	6	196	1.03061
		All Classic	421	19	402	1.04726
	Classic Plus (CP)	Male	8	1	7	1.14286
		Female	3	0	3	1.00000
		All CP	11	1	10	1.10000
	Premium	Male	19	1	18	1.05556
		Female	12	2	10	1.20000
		All Premium	31	3	28	1.10714
	Total	Male	246	15	231	1.06494
		Female	217	8	209	1.03828
		Total	463	23	440	1.05227



Type of Pensioner	Section	Gender	Original members	Members excluded	Included members	Uprating factor
Early retirement	Classic	Male	1,102	24	1,078	1.02226
		Female	760	18	742	1.02426
		All Classic	1,862	42	1,820	1.02308
	Classic Plus (CP)	Male	54	0	54	1.00000
		Female	20	0	20	1.00000
		All CP	74	0	74	1.00000
	Premium	Male	138	2	136	1.01471
		Female	39	2	37	1.05405
		All Premium	177	4	173	1.02312
	Total	Male	1,294	26	1,268	1.02050
		Female	819	20	799	1.02503
		Total	2,113	46	2,067	1.02225
Ill health retirement	Classic	Male	74	0	74	1.00000
		Female	39	0	39	1.00000
		All Classic	113	0	113	1.00000
	Classic Plus (CP)	Male	0	0	0	-
		Female	1	0	1	1.00000
		All CP	1	0	1	1.00000
	Premium	Male	5	0	5	1.00000
		Female	1	0	1	1.00000
		All Premium	6	0	6	1.00000
	Total	Male	79	0	79	1.00000
		Female	41	0	41	1.00000
		Total	120	0	120	1.00000
All CSCS above age 60			2,696	69	2,627	1.02627



Table 6.5: Pensioner member data uprating factors (CSCS below 60)

Type of Pensioner	Section	Gender	Original members	Members excluded	Included members	Uprating factor
Age retirement	Classic	Male	7	2	5	1.40000
		Female	6	4	2	3.00000
		All Classic	13	6	7	1.85714
	Classic Plus (CP)	Male	0	0	0	-
		Female	0	0	0	-
		All CP	0	0	0	-
	Premium	Male	1	0	1	1.00000
		Female	0	0	0	-
		All Premium	1	0	1	1.00000
	Total	Male	8	2	6	1.33333
		Female	6	4	2	3.00000
		Total	14	6	8	1.75000
Early retirement	Classic	Male	284	105	179	1.58659
		Female	310	132	178	1.74157
		All Classic	594	237	357	1.66387
	Classic Plus (CP)	Male	23	2	21	1.09524
		Female	9	2	7	1.28571
		All CP	32	4	28	1.14286
	Premium	Male	62	18	44	1.40909
		Female	37	13	24	1.54167
		All Premium	99	31	68	1.45588
	Total	Male	369	125	244	1.51230
		Female	356	147	209	1.70335
		Total	725	272	453	1.60044



Type of Pensioner	Section	Gender	Original members	Members excluded	Included members	Uprating factor
III health retirement	Classic	Male	256	4	252	1.01587
		Female	110	11	99	1.11111
		All Classic	366	15	351	1.04274
	Classic Plus (CP)	Male	1	0	1	1.00000
		Female	0	0	0	-
		All CP	1	0	1	1.00000
	Premium	Male	11	0	11	1.00000
		Female	3	0	3	1.00000
		All Premium	14	0	14	1.00000
	Total	Male	268	4	264	1.01515
		Female	113	11	102	1.10784
		Total	381	15	366	1.04098
All CSCS below age 60			1,120	293	827	1.35429

Table 6.6: Dependant pensioner member data uprating factors (dependants)

Section	Gender	Original members	Members excluded	Included members	Uprating factor
Classic	Male	11,383	342	11,041	1.03098
	Female	109,690	1,228	108,462	1.01132
	All Classic	121,073	1,570	119,503	1.01314
Classic Plus (CP)	Male	112	0	112	1.00000
	Female	181	3	178	1.01685
	All CP	293	3	290	1.01034
Premium	Male	465	31	434	1.07143
	Female	861	51	810	1.06296
	All Premium	1,326	82	1,244	1.06592
Nuvos	Male	42	10	32	1.31250
	Female	72	14	58	1.24138
	All Nuvos	114	24	90	1.26667
All dependants	Male	12,002	383	11,619	1.03296
	Female	110,804	1,296	109,508	1.01183
	Total	122,806	1,679	121,127	1.01386



E: Final dataset

- 6.30 The final dataset as at 31 March 2012 covering some 610,000 pensioner and dependant pensioner members is summarised in paragraph 6.4 and in the following tables. Overall, 99.1% of current pensioner and dependant pensioner member records provided were used to generate the final dataset to be used for the 2012 valuation.



Table 6.7: Pensioner member final data summary (excluding CSCS)

Type of Pensioner	Section	Gender	Number of members	Total pension (i) (£m pa)	Average age (ii)
Age retirement	Classic	Male	163,843	1,530.1	73.7
		Female	145,090	647.7	73.3
		All Classic	308,933	2,177.8	73.6
	Classic Plus (CP)	Male	1,554	23.2	65.0
		Female	604	5.1	64.0
		All CP	2,158	28.3	64.8
	Premium	Male	7,690	57.7	64.7
		Female	3,967	15.6	63.8
		All Premium	11,657	73.3	64.5
	Nuvos	Male	286	0.3	65.8
		Female	85	0.1	64.2
		All Nuvos	371	0.4	65.5
	Total	Male	173,373	1,611.3	73.2
		Female	149,746	668.5	73.0
		Total	323,119	2,279.8	73.2
Early retirement	Classic	Male	55,065	843.4	68.8
		Female	40,733	310.9	66.2
		All Classic	95,798	1,154.3	68.1
	Classic Plus (CP)	Male	565	9.9	61.1
		Female	295	3.2	59.6
		All CP	860	13.1	60.7
	Premium	Male	1,560	24.7	61.0
		Female	1,040	8.2	59.4
		All Premium	2,600	32.9	60.6
	Nuvos	Male	29	0.1	56.5
		Female	26	0.1	57.7
		All Nuvos	55	0.2	57.1
	Total	Male	57,219	878.0	68.5
		Female	42,094	322.4	66.0
		Total	99,313	1,200.5	67.8

(i) Including pension increases awarded in April 2012

(ii) Weighted by pension



Type of Pensioner	Section	Gender	Number of members	Total pension (i) (£m pa)	Average age (ii)
Ill health retirement	Classic	Male	30,464	246.5	67.4
		Female	29,571	160.1	66.4
		All Classic	60,035	406.6	67.0
	Classic Plus (CP)	Male	101	1.2	56.6
		Female	77	0.7	53.0
		All CP	178	1.9	55.3
	Premium	Male	412	2.8	55.1
		Female	295	1.7	51.1
		All Premium	707	4.5	53.6
	Nuvos	Male	18	0.1	39.5
		Female	8	0.1	45.7
		All Nuvos	26	0.1	42.0
	Total	Male	30,995	250.6	67.2
		Female	29,951	162.5	66.2
		Total	60,946	413.1	66.8
Pensioners excluding CSCS			483,378	3,893.4	70.9

(i) Including pension increases awarded in April 2012

(ii) Weighted by pension

Table 6.8: Pensioner member final data summary (CSCS above 60)

Type of Pensioner	Section	Gender	Number of members	Total pension (i) (£m pa)	Average age (ii)
Age retirement	Classic	Male	219	4.3	64.3
		Female	202	1.8	64.3
		All Classic	421	6.1	64.3
	Classic Plus (CP)	Male	8	0.2	63.8
		Female	3	0.0	64.7
		All CP	11	0.2	63.9
	Premium	Male	19	0.3	64.6
		Female	12	0.1	61.9
		All Premium	31	0.4	64.2
	Total	Male	246	4.8	64.3
		Female	217	1.9	64.2
		Total	463	6.7	64.3



Type of Pensioner	Section	Gender	Number of members	Total pension (i) (£m pa)	Average age (ii)
Early retirement	Classic	Male	1,102	22.2	64.3
		Female	760	8.3	64.0
		All Classic	1,862	30.6	64.2
	Classic Plus (CP)	Male	54	1.1	63.4
		Female	20	0.2	63.2
		All CP	74	1.3	63.4
	Premium	Male	138	3.1	63.2
		Female	39	0.5	63.4
		All Premium	177	3.6	63.3
	Total	Male	1,294	26.4	64.1
		Female	819	9.0	64.0
		Total	2,113	35.5	64.1
Ill health retirement	Classic	Male	74	1.0	63.5
		Female	39	0.5	62.7
		All Classic	113	1.4	63.2
	Classic Plus (CP)	Male	0	0.0	-
		Female	1	0.0	60.5
		All CP	1	0.0	60.5
	Premium	Male	5	0.0	62.3
		Female	1	0.0	62.0
		All Premium	6	0.0	62.3
	Total	Male	79	1.0	63.4
		Female	41	0.5	62.6
		Total	120	1.5	63.1
CSCS above 60			2,696	43.6	64.1

(i) Including pension increases awarded in April 2012

(ii) Weighted by pension



Table 6.9: Pensioner member final data summary (CSCS below 60)

Type of Pensioner	Section	Gender	Number of members	Total pension (i) (£m pa)	Average age (ii)
Age retirement	Classic	Male	7	0.1	57.6
		Female	6	0.1	59.1
		All Classic	13	0.2	58.3
	Classic Plus (CP)	Male	0	0.0	-
		Female	0	0.0	-
		All CP	0	0.0	-
	Premium	Male	1	0.0	59.5
		Female	0	0.0	-
		All Premium	1	0.0	59.5
	Total	Male	8	0.1	58.0
		Female	6	0.1	59.1
Total		14	0.2	58.5	
Early retirement	Classic	Male	284	4.5	57.4
		Female	310	3.5	57.4
		All Classic	594	8.0	57.4
	Classic Plus (CP)	Male	23	0.4	59.4
		Female	9	0.1	57.3
		All CP	32	0.6	58.9
	Premium	Male	62	1.2	58.4
		Female	37	0.3	57.4
		All Premium	99	1.5	58.2
	Total	Male	369	6.2	57.7
		Female	356	3.9	57.4
Total		725	10.1	57.6	

(i) Including pension increases awarded in April 2012

(ii) Weighted by pension



Type of Pensioner	Section	Gender	Number of members	Total pension (i) (£m pa)	Average age (ii)
Ill health retirement	Classic	Male	256	3.0	52.0
		Female	110	1.2	52.3
		All Classic	366	4.2	52.1
	Classic Plus (CP)	Male	1	0.0	48.0
		Female	0	0.0	-
		All CP	1	0.0	48.0
	Premium	Male	11	0.1	50.6
		Female	3	0.0	50.1
		All Premium	14	0.1	50.5
	Total	Male	268	3.1	52.0
Female		113	1.2	52.3	
Total		381	4.3	52.0	
CSCS below 60			1,120	14.6	56.0

(i) Including pension increases awarded in April 2012

(ii) Weighted by pension

Table 6.10: Dependant pensioner member final data summary

Section	Gender	Number of members	Total pension (i) (£m pa)	Average age (ii)
Classic	Male	11,383	19.4	57.9
	Female	109,690	444.7	79.4
	All Classic	121,073	464.1	78.5
Classic Plus	Male	112	0.5	38.7
	Female	181	1.0	52.6
	All Classic Plus	293	1.4	48.2
Premium	Male	465	1.1	39.3
	Female	861	2.6	48.9
	All Premium	1,326	3.6	46.1
Nuvos	Male	42	0.0	31.4
	Female	72	0.0	43.9
	All Nuvos	114	0.1	39.2
Total	Male	12,002	20.9	56.5
	Female	110,804	448.3	79.1
	Total	122,806	469.2	78.1

(i) Including pension increases awarded in April 2012

(ii) Weighted by pension



7 Grouping of individual member records and membership projections

Grouping of membership

- 7.1 The final datasets for active, deferred and pensioner/dependant pensioner members (Tables 4.8, 5.1 and 6.7 to 6.10) summarise the membership for each section of the Scheme (ie Classic, Classic Plus, Premium and Nuvos) and also within valuation groups (ie based on salary bands or whether they were pre-Fresh Start prison officers for active members or type of retirement/CSCS status for current pensioners).
- 7.2 Within the final dataset individual members have been grouped together for the purposes of calculating liabilities. This grouping is necessary to accommodate the volume of data within our valuation system. The approach taken to grouping the data has been tested to ensure it does not result in any distortion of the valuation results. The grouping is further explained below:
- 7.3 For active members, for each Scheme section and valuation group, the membership was grouped by age nearest (at the valuation date) and nearest service (ie 0 years, 1 year, 2 years,... etc). Further details of the grouping of active data can be found in our draft report *Principal Civil Service Pension Scheme: Valuation as at 31 March 2012: Report on methodology* dated 16 January 2014⁶.
- 7.4 For deferred members, for each Scheme section, the membership was also grouped by age nearest (at the valuation date).
- 7.5 For pensions in payment, for each section, the membership was grouped by age nearest (at the valuation date) and by type of pension in payment (ie ill health retirement, non-ill health retirement, dependant pension or CSCS member).

Membership projections

- 7.6 HMT Directions requires the actuary to project the membership data if that will produce a more accurate estimate of the valuation results.
- 7.7 Further details of the projection of membership data can be found in our draft report *Principal Civil Service Pension Scheme: Valuation as at 31 March 2012: Report on methodology* dated 16 January 2014.

⁶ The final version of the methodology report has been dated 14 July 2014.



Appendix A: Data items

A-1: Active movement data

The following data (VALEXP tables) was provided for active staff who rejoined the Scheme or who left the Scheme during the inter-valuation period (1 April 2007 and 31 March 2012) :

(The full details of the data provided are set out in in Xafinity Claybrook's valuation extract table specification dated 26 April 2010.)

- a. member identifier number
- b. section of Scheme (ie Classic, Classic Plus, Premium, Nuvos, partnership)
- c. date of birth
- d. gender
- e. marital status at extract date
- f. date of death exit
- g. number of times retired on age retirement
- h. date of last age retirement exit
- i. number of times partial retired
- j. date of last partial retirement
- k. number of times left Scheme or retired early
- l. date of last withdrawal or early retirement
- m. number of times retired on ill health
- n. date of last ill health retirement
- o. ill health tier indicator (eg upper/lower)
- p. number of times rejoined the Scheme
- q. date last rejoined the Scheme
- r. previous reckonable service available for aggregation
- s. aggregation indicator (ie opted to aggregate, opted to keep service separate, or not made an option)
- t. exposed to risk period (total period in the inter-valuation period during which the member was eligible for risk benefits)
- u. salary (including pensionable allowances) as at the valuation date/leaving date, if active at that date. For part-timers this value is the full-time equivalent
- v. contracted-out earnings for the year starting 1 April prior to the valuation/leaving date, if active at that date
- w. pensionable pay in the 12 months ending on valuation/leaving date, if active at that date.
- x. basic pensionable pay in the 12 months ending on valuation/leaving date, if active at that date
- y. Items t, u, v and w were also provided for the previous valuation date. So replace 'valuation/leaving date' with 'previous valuation date'
- z. contracted-out earnings for the year starting 1 April prior to valuation/leaving date, if active on that date
- aa. pensionable pay in the 12 months ending on valuation/leaving date, if active at that date
- bb. Prison Officer or reserved rights member indicator
- cc. Bulk transfer indicator (ie whether left the Scheme by bulk transfer)



A-2: Deferred death data

The following data was provided for deferred members who left the Scheme by death during the inter-valuation period (1 April 2007 and 31 March 2012):

- a. member identifier number (not consistent with active identifier number)
- b. prison officer indicator
- c. section of Scheme (ie Classic, Classic Plus, Premium, Nuvos)
- d. gender
- e. date of birth
- f. current event status
- g. effective date for current event status
- h. marital status
- i. postcode (residential)
- j. CSCS member indicator
- k. service end date
- l. date left active service
- m. date pension due to commence (ie NPA date)
- n. date of death
- o. total member pension revalued to 2012 (but excludes April 2012 pension increase)
- p. dependant pension arising
- q. identifier number for the dependant
- r. dependant classification (eg spouse or child)

A-3: Pensioner death data

The following data was provided for pensioner members who left the Scheme by death during the inter-valuation period (1 April 2007 and 31 March 2012):

- a. member identifier number (not consistent with active identifier number)
- b. prison officer indicator
- c. section of Scheme (ie Classic, Classic Plus, Premium, Nuvos)
- d. gender
- e. date of birth
- f. current event status
- g. effective date for current event status
- h. marital status
- i. postcode (residential)
- j. CSCS member indicator
- k. service end date
- l. date pension commenced
- m. reason for pension (ie age, early, ill health)
- n. type of ill health pension (ie upper/lower)
- o. date of death
- p. total member pension revalued to 2012
- q. dependant pension arising revalued to 2012
- r. identifier number for the dependant
- s. dependant classification (eg spouse or child)



A-4: Dependant death data

The following data was provided for dependant members who left the Scheme by death during the inter-valuation period (1 April 2007 and 31 March 2012):

- a. member identifier number (not consistent with active identifier number)
- b. section of Scheme (ie Classic, Classic Plus, Premium, Nuvos)
- c. gender
- d. date of birth
- e. current event status
- f. effective date for current event status
- g. CSCS member indicator
- h. service end date
- i. beneficiary type (eg dependant, widow, widower, child, ex-spouse)
- j. date pension commenced
- k. reason for pension (ie age, early, ill health)
- l. type of ill health pension (ie upper/lower)
- m. date of death
- n. total member pension revalued to 2012

Data provided as at 31 March 2012 is as follows:

A-5. Active members (VALDATA tables) as at 31 March 2012

- a. member identifier number
- b. date of birth
- c. gender
- d. section of Scheme (ie Classic, Classic Plus, Premium, Nuvos)
- e. salary at valuation date (for part-timers this value is full-time equivalent)
- f. contracted-out earnings for year starting on 1 April prior to the valuation date
- g. pensionable pay in the 12 months ending on the valuation date
- h. basic pensionable pay in the 12 months ending on the valuation date
- i. final pensionable pay as at the valuation date
- j. reckonable service* at 80th
- k. reckonable service* at 60th
- l. unaggregated pension (ie pension arising from reckonable service excluding any option to aggregate)
- m. aggregated pension (ie pension arising from reckonable service including previous service from any option to aggregate)
- n. aggregated service (ie previous reckonable service which has been aggregated with current service)
- o. aggregation date (the date that the aggregation was notified to Capita)
- p. latest date joined Scheme
- q. family benefits service
- r. statutory family benefits service
- s. qualifying service



- t. transferred in service (reckonable service credited following non-bulk transfers into the Scheme)
- u. Club transferred in service
- v. NI modification
- w. part time indicator
- x. part-time fraction at valuation date
- y. whether a member has 'formally retired' and been re-employed
- z. prison officer indicator
- aa. valuation status (ie fully active or member has left payroll and not rejoined (but is active))
- bb. added pension credited to the member's account at the valuation date
- cc. Nuvos pension (NUVPEN)
- dd. Nuvos pension revalued to the revaluation date (NUVPENR)
- ee. Nuvos revaluation date
- ff. postcode (where recorded)

* includes allowance for added years, transfers in (including Club), part time service, breaks in service, aggregation from previous awards and doubling of service for pre-Fresh Start prison officers only.

A-6 Deferred members as at 31 March 2012

The same information as set out in Appendix A-2 but excludes entries for n to r.

A-7: Pensioners as at 31 March 2012

The same information as set out in Appendix A-3 but excludes entries for o to s.

A-8: Dependants as at 31 March 2013

The same information as set out in Appendix A-4 but excludes entries for m and n.



A-9: Additional commutation data

Data provided in respect of pensioners commencing pension during the inter-valuation period (1 April 2007 to 31 March 2012):

- a. member identifier number
- b. current status indicator
- c. current status effective date
- d. section of Scheme
- e. award type (age, ill health, redundancy etc)
- f. amount of pre-commuted pension amount
- g. amount of pension commuted
- h. amount of post-commuted pension
- i. amount of lump sum by commutation
- j. amount of standard lump sum (80ths)

We have used the member identifier number to look up date of birth (to obtain age when retired) and gender against the main pensioner data extract as at 31 March 2012.

A-10 Additional salary data

Data was provided in respect of active members at both the 2007 and 2012 valuation dates as follows:

- a. Member identifier number
- b. Gender
- c. Date of birth
- d. Basic salary
- e. For each basic salary, when the salary start date was

A-11: Pension debit data

Data was provided in respect of pension debits at the 2012 valuation date as follows:

- a. National insurance number
- b. Staff number
- c. Member identifier number
- d. Date of birth
- e. Section of Scheme
- f. Effective date of the pensions sharing order
- g. Member's pension debit
- h. Pre-retirement spouse's pension debit
- i. Net lump sum debit
- j. Any partner pension debit



Appendix B: Description of ASLC salary bands

Except for pre-Fresh Start prison officers, the actives data has been grouped into the following salary bands:

Salary Band	Annual Full Time Equivalent Pensionable Salary in 2012/13
1	£21,500 and under
2	£21,501 to £44,500
3	£44,501 to £74,500
4	£74,501 and over



Appendix C: Protection and member categories

Protected Members

- C.1 Scheme members who, as of 1 April 2012, have 10 years or less to their current pension age will see no change in when they can retire, nor any change in the amount of pension they receive at their current NPA. They will remain members of their existing Schemes up to and including the point at which they draw their pension rights and in which case all current Scheme rules will continue to apply.

Tapered Members

- C.2 Scheme members in **Classic** and **Premium** who on 1 April 2012 are between 46 years and 6 months and 50 (or who are in **Nuvos** and aged between 51 years and 6 months and 55) will have a choice to continue to accrue additional pension in their existing Schemes, on a tapered basis. They will accrue for two months in their existing Schemes for every month they are older than 46 years and 6 months (51 years and 6 months for **Nuvos**), as set out in the table below.
- C.3 Staff in this “tapering group” will be able to take their “Part 1” pension at their current NPA, including any additional accrual they build up post 2015. If they remained an active member after the transitional protection has ended, they would then begin to accrue “Part 2” pension in the 2015 Scheme, which would become payable in full from the NPA of the new Scheme (or taken early with an actuarial reduction).



Table C1: Tapering - Classic and Premium:

Age at 1 April 2012		Age at 1 April 2015		Months of Protection	Age at end of protection		Date at end of protection
year	month	year	month		year	month	
49	11	52	11	82	59	9	Feb-22
49	10	52	10	80	59	6	Dec-21
49	9	52	9	78	59	3	Oct-21
49	8	52	8	76	59	0	Aug-21
49	7	52	7	74	58	9	Jun-21
49	6	52	6	72	58	6	Apr-21
49	5	52	5	70	58	3	Feb-21
49	4	52	4	68	58	0	Dec-20
49	3	52	3	66	57	9	Oct-20
49	2	52	2	64	57	6	Aug-20
49	1	52	1	62	57	3	Jun-20
49	0	52	0	60	57	0	Apr-20
48	11	51	11	58	56	9	Feb-20
48	10	51	10	56	56	6	Dec-19
48	9	51	9	54	56	3	Oct-19
48	8	51	8	52	56	0	Aug-19
48	7	51	7	50	55	9	Jun-19
48	6	51	6	48	55	6	Apr-19
48	5	51	5	46	55	3	Feb-19
48	4	51	4	44	55	0	Dec-18
48	3	51	3	42	54	9	Oct-18
48	2	51	2	40	54	6	Aug-18
48	1	51	1	38	54	3	Jun-18
48	0	51	0	36	54	0	Apr-18
47	11	50	11	34	53	9	Feb-18
47	10	50	10	32	53	6	Dec-17
47	9	50	9	30	53	3	Oct-17
47	8	50	8	28	53	0	Aug-17
47	7	50	7	26	52	9	Jun-17
47	6	50	6	24	52	6	Apr-17
47	5	50	5	22	52	3	Feb-17
47	4	50	4	20	52	0	Dec-16
47	3	50	3	18	51	9	Oct-16
47	2	50	2	16	51	6	Aug-16
47	1	50	1	14	51	3	Jun-16
47	0	50	0	12	51	0	Apr-16
46	11	49	11	10	50	9	Feb-16
46	10	49	10	8	50	6	Dec-15
46	9	49	9	6	50	3	Oct-15
46	8	49	8	4	50	0	Aug-15
46	7	49	7	2	49	9	Jun-15
46	6	49	6	0	49	6	Apr-15



Table C2: Tapering – Nuvos

Age at 1 April 2012		Age at 1 April 2015		Months of Protection	Age at end of protection		Date of end of protection
year	month	year	month		year	month	
54	11	57	11	82	64	9	Feb-22
54	10	57	10	80	64	6	Dec-21
54	9	57	9	78	64	3	Oct-21
54	8	57	8	76	64	0	Aug-21
54	7	57	7	74	63	9	Jun-21
54	6	57	6	72	63	6	Apr-21
54	5	57	5	70	63	3	Feb-21
54	4	57	4	68	63	0	Dec-20
54	3	57	3	66	62	9	Oct-20
54	2	57	2	64	62	6	Aug-20
54	1	57	1	62	62	3	Jun-20
54	0	57	0	60	62	0	Apr-20
53	11	56	11	58	61	9	Feb-20
53	10	56	10	56	61	6	Dec-19
53	9	56	9	54	61	3	Oct-19
53	8	56	8	52	61	0	Aug-19
53	7	56	7	50	60	9	Jun-19
53	6	56	6	48	60	6	Apr-19
53	5	56	5	46	60	3	Feb-19
53	4	56	4	44	60	0	Dec-18
53	3	56	3	42	59	9	Oct-18
53	2	56	2	40	59	6	Aug-18
53	1	56	1	38	59	3	Jun-18
53	0	56	0	36	59	0	Apr-18
52	11	55	11	34	58	9	Feb-18
52	10	55	10	32	58	6	Dec-17
52	9	55	9	30	58	3	Oct-17
52	8	55	8	28	58	0	Aug-17
52	7	55	7	26	57	9	Jun-17
52	6	55	6	24	57	6	Apr-17
52	5	55	5	22	57	3	Feb-17
52	4	55	4	20	57	0	Dec-16
52	3	55	3	18	56	9	Oct-16
52	2	55	2	16	56	6	Aug-16
52	1	55	1	14	56	3	Jun-16
52	0	55	0	12	56	0	Apr-16
51	11	54	11	10	55	9	Feb-16
51	10	54	10	8	55	6	Dec-15
51	9	54	9	6	55	3	Oct-15
51	8	54	8	4	55	0	Aug-15
51	7	54	7	2	54	9	Jun-15
51	6	54	6	0	54	6	Apr-15



Appendix D: Comparison of membership at 31 March 2007 and 31 March 2012

Table D1: Actives

Salary Band	Gender	2007				2012					
		Number of members	Average pensionable pay (£)	Average age	Average service (years)	Number of members	Total pensionable pay (i) (£m)	Average pensionable pay (i) (£)	Average age (ii)	Average service (ii) (years)	Total accrued pension (£m)
Salary Band 1	Male	94,244	15,217	41.3	7.8	68,416	1,240.0	18,124	44.2	10.4	181.9
	Female	162,306	15,480	40.3	8.4	122,923	2,241.7	18,236	43.8	10.8	331.2
Salary Band 2	Male	160,827	26,111	43.9	14.5	144,560	4,321.0	29,891	46.0	16.5	953.1
	Female	159,398	24,600	42.3	13.8	141,619	4,026.5	28,432	44.2	15.3	817.8
Salary Band 3	Male	31,641	47,600	48.1	19.4	27,983	1,542.9	55,136	48.2	18.9	391.4
	Female	17,498	47,149	43.9	14.2	18,946	1,036.3	54,696	44.7	15.1	212.8
Salary Band 4	Male	4,837	80,201	51.5	19.8	3,429	317.5	92,582	51.8	18.4	79.6
	Female	1,923	79,302	48.8	16.6	1,558	140.1	89,936	49.2	16.6	31.8
Prison Officers	Male	5,438	30,597	52.7	18.6	2720	86.1	31,659	54.4	23.8	25.6
	Female	336	30,388	48.9	22.0	200	6.4	32,183	51.9	28.9	2.3
Total		638,448	23,675	42.6	12.1	532,354	14,958.5	28,099	45.4	15.0	3,027.5

- (i) Full-time equivalent pay
(ii) Weighted by full-time equivalent pay



Table D2: Deferreds

Gender	2007			2012			
	Number of members	Average deferred pension (£ pa)	Average age	Number of members	Total deferred pension (i) (£m pa)	Average deferred pension (i) (£ pa)	Average age (ii)
Male	149,700	3,689	47.5	165,395	673.3	4,071	52.0
Female	179,169	2,247	46.3	211,445	635.5	3,005	49.9
Total	328,869	2,903	46.9	376,840	1,309	3,473	51.0

(i) Including pension increases awarded in April 2012

(ii) Weighted by pension

Table D3: Pensioners and Dependants

Type of Pensioner	Gender	2007			2012			
		Number of members	Average Pension (£ pa)	Average age	Number of members	Total pension (i) (£m pa)	Average pension (i) (£ pa)	Average age (ii)
Age retirement	Male	161,728	7,740	74.4	173,627	1,616.2	9,309	73.2
	Female	130,441	3,538	75.0	149,969	670.5	4,471	73.0
Early retirement	Male	43,640	12,720	67.8	58,882	910.7	15,466	68.3
	Female	25,601	6,131	67.4	43,269	335.4	7,751	65.8
Ill health retirement	Male	35,261	6,489	64.9	31,342	254.7	8,126	67.0
	Female	32,161	4,324	64.5	30,105	164.2	5,455	66.1
Dependants	Male	8,982	1,340	58.0	12,002	20.9	1,743	56.5
	Female	117,553	3,080	78.2	110,804	448.3	4,046	79.1
Total		555,367	5,704	73.1	610,000	4,420.9	7,247	71.5

(i) Including pension increases awarded in April 2012

(ii) Weighted by pension



Appendix E: Benefit summary

The main benefit provisions of the Scheme for each category of member are shown in Table E1. Members of the Classic Plus section have some benefits which were accrued in the Classic section but they are now accruing the same benefits as members of the Premium section.

The main benefit provisions of the 2015 Scheme are shown in Table E.2.

Table E1: Previous scheme benefits

		CLASSIC From 1972	PREMIUM From 1 October 2002	NUVOS From 30 July 2007
1	Type of Scheme	Final salary	Final salary	Career Average (but with LS death benefits and a cap on the pension defined in terms of Final Pay)
2	Relationship with S2P	Contracted out	Contracted out	Contracted out
3	Employees Covered	In service pre 1/10/02 and did not opt for Premium or Classic Plus style benefits from 1/10/02	Defined benefit option for joiners between 1/10/02 and 29/7/07, or optants on 1/10/02 from Classic	Defined benefit option for new entrants post 30/7/07 and for re-entrants from Premium or Classic with a gap of more than 5 years of service
4	Normal Retiring Age (NRA)	60	60	65
5	Pensionable Pay (PP)	Basic pay; pensionable allowances; fluctuating pensionable earnings averaged over 3 years	Permanent pensionable pay and allowances (PPPA); fluctuating pensionable bonuses and allowances (FPBA)	Permanent pensionable pay and allowances (PPPA); fluctuating pensionable bonuses and allowances (FPBA)*



		CLASSIC From 1972	PREMIUM From 1 October 2002	NUVOS From 30 July 2007
6	Averaging period for Determining Final Pensionable Pay (FPP)	Best 12 months in last 3 years	Best of - PPPA in last 12 months - PPPA in best of last 4 scheme years - PP averaged over any consecutive 3 scheme years in last 13 PP earlier than last complete scheme year re-valued in line with PI Act (currently CPI)	Best of a) PPPA in last 12 months b) PPPA in best of last 10 scheme years (adjusted for inflation) c) PE averaged over any consecutive 3 scheme years adjusted for inflation before averaging (But pension is calculated as Career Average with indexation in line with the increases in the PI Act, currently CPI)
7	Normal Retirement			
	Pension to Member	1/80	1/60	2.3% of pensionable earnings each year Career Average Revalued Earnings up to pension limit, generally 75% x final pay (But benefits derived from club transfers or from earlier service in classic or premium are calculated on a 1/60 final salary basis with pension age 65)
	Lump Sum	3/80	By commutation. Single factor £12:£1	By commutation Single factor £12:£1
	Spouse's Pension	1/160 Maximum service of 45 years	1/160 Maximum of 45 years reckonable service	3/8 of member pension (pre commutation)



		CLASSIC From 1972	PREMIUM From 1 October 2002	NUVOS From 30 July 2007
8	Pension Increases	In payment: increased in line with the PI Act, on excess over GMP	In payment: increased in line with the PI Act, on excess over GMP	In payment: increased in line with the PI Act, on excess over GMP
9	Ill-Health Retirement	Single tier – payable after 2 years Unreduced pension Service enhanced 2 to 5 – accrued 5 to 10 – service doubled subject to maximum of potential service to 65 over 10 – greater of service enhanced to 20 years (subject to maximum of potential service to 65) or additional 6 2/3 years (subject to maximum of potential service to 60)	Two tier Lower – likely to be able to work in some employment Unreduced Service enhanced 2 to 5 – service doubled 5 to 10 - service enhanced to 10 years Over 10 – no enhancement Subject in all cases to a maximum enhancement of 1/2 potential service to 60 Higher – unlikely to work in any capacity in future. Unreduced retirement benefit based on full potential service to age 60	Two tier Lower – likely to be able to work in some employment Accrued pension only Higher – unlikely to work in any capacity in future Enhancement = (accrued pension/contributing years) x (years to age 65)
10	Dependant's Pension on Death in Service	1/160 x service enhanced as for IH	1/160 x service enhanced as follows <10 - service doubled over 10 -service+10 subject to a maximum enhancement of full potential service to 60	3/8 of member pension Scaled up to represent a pension on enhanced service Enhancement to notional member's pension on death in service = (accrued pension /contributing years) * (the least of (a)10, (b) member's contributing years and (c)years to age 65)



		CLASSIC From 1972	PREMIUM From 1 October 2002	NUVOS From 30 July 2007
11	Dependant's Short-Term Pension			
	Death in Service	3 months PP (6 months if dependant children)	None	None
	Death after Retirement	3 months pension (6 months if dependant children)	None	None
12	Lump Sum Death Benefits			
	Death in Service	2 x PP	3 x PP	The greater of <ul style="list-style-type: none"> • 2 x Final Pay† (less any LS benefits payable under any other section of PCSPS.) • 5 x accrued pension (less any pension already received)
	Death after Retirement	5 years pension less lump sum and pension already received	Balance of 5 years pension	Balance of 5 years pension



		CLASSIC From 1972	PREMIUM From 1 October 2002	NUVOS From 30 July 2007
13	Children's Pensions	25% of member's entitlement per child to maximum of 50% – member's entitlement calculated on enhanced service for in service deaths Orphans 33.3% per child, maximum of 66.6%	30% of members entitlement per child to maximum of 60% – member's entitlement calculated on enhanced service for in service deaths Orphans 50% per child, maximum of 100%	30% of members (pre commutation) entitlement per child to maximum of 60% – member's (pre commutation) entitlement calculated on enhanced service for in service deaths Orphans 50% per child, maximum of 100%
14	'Dependant' provision	Widow(er) Registered civil partner	Widow(er) Registered civil partner Nominated partner declaration signed by both parties; financially dependent or inter –dependent; cohabiting as husband /wife or civil partners for a long term relationship free to marry or enter civil partnership	Widow(er) Registered civil partner Nominated partner declaration signed by both parties; financially dependent or inter –dependent; cohabiting as husband /wife or civil partners for a long term relationship free to marry or enter civil partnership
15	Cessation on remarriage or cohabitation	Yes	No	No



		CLASSIC From 1972	PREMIUM From 1 October 2002	NUVOS From 30 July 2007
16	Withdrawal Benefits on Leaving			
	<i>At Least 2 Years' Total Reckonable Service</i>			
	Preserved Benefits	1/80 payable at age 60 +3/80 LS +1/160 dependant's benefit	1/60 payable at age 60 (LS by commutation) +1/160 dependant's benefit	As for Normal Retirement— from age 65
	Increases Before Retirement	Increases specified in the PI Act (currently CPI)	Increases specified in the PI Act (currently CPI)	Increases specified in the PI Act (currently CPI)
	Death Before Retirement	50% spouse's pension Plus retirement LS	1/160 spouse's pension LS of lesser of 2 x PP at leaving increased with PI Act (currently CPI) or 5 x deferred pension	3/8 of member's deferred pension + 5 x deferred pension
	Transfer Value	Yes	Yes	Yes
	<i>Less than 2 Years' Total Reckonable Service</i>	Refund of contributions or transfer option	Refund of contributions or transfer option	Refund of contributions or transfer option (if over 3 months' service)
17	Refunds to Unmarried Members at Retirement.	Yes	No	No



Table E2: 2015 Scheme benefits

		2015 Scheme
1	Type of Scheme	Career Average.
2	Employees Covered	Defined benefit option from 1/4/2015 for: new entrants after 31/3/15 and for existing scheme members who don't receive full protection.
3	Normal Retiring Age (NRA)	Maximum of 65 and the member's state pension age. An actuarially cost neutral reduction / increase will be made for early / late retirement.
4	Pensionable Earnings	Permanent pensionable earnings and fluctuating pensionable earnings.
5	Normal Retirement	
	Pension to Member	2.32% of pensionable earnings each scheme year, revalued to retirement (see point 7.).
	Lump Sum	By commutation by single factor of £12:£1
	Surviving Adult's Pension	37.5% of member pension (pre commutation, ignoring any early retirement reductions)
6	Scheme year	Starts 1 April.
7	Revaluation of active members' pensions	Increased each April by prices, as defined by HMT Order (currently CPI). The whole of the accrued pension is increased (including the pension accrued during the previous 12 months). If a member left active service in the previous 12 months, then a proportionate increase is applied.
8	Pension Increases	In payment - increased in line with the PI Act, on excess over GMP



		2015 Scheme
9	Ill Health Retirement	<p>Payable if member has at least 2 years of qualifying service (includes service in existing and 2015 schemes).</p> <p>Two tier:</p> <p>Lower – likely to be able to work in some employment; Accrued pension only, no early retirement reduction.</p> <p>Higher – unlikely to work in any capacity in future; No early retirement reduction. Enhancement = (accrued pension in 2015 scheme/contributing years in 2015 scheme) x (years to NRA)</p> <p>Surviving Adult's Pension</p> <p>37.5% of member's pension (including any enhancement), pre-commutation, unreduced.</p>
10	Surviving Adult's Pension on Death in Service	<p>Payable if member has at least 1 year of qualifying service (includes service in existing and 2015 schemes).</p> <p>37.5% of member pension where the member pension is enhanced by:</p> <p>Enhancement = (accrued pension in 2015 scheme /contributing years in 2015 scheme) x (the least of (a)10, (b) member's contributing years in 2015 scheme and (c)years to NRA)</p> <p>Provision for children's pensions.</p>
11	Lump Sum Death Benefits	<p>Death in Service</p> <p>The greater of</p> <ul style="list-style-type: none"> • 2 x Final Pay • 5 x accrued pension in 2015 scheme <p>Death after Retirement</p> <p>Balance of 5 years 2015 scheme pension</p> <p>Death in Deferment</p> <p>See point 13.</p>



		2015 Scheme
12	'Dependant' provision	Provision for: <ul style="list-style-type: none"> • Widow(er) • Registered civil partner • Nominated partner <ul style="list-style-type: none"> ▪ declaration signed by both parties ▪ financially dependent or inter -dependent ▪ cohabiting as husband /wife or civil partners for a long term relationship <p>Dependants in receipt of benefits are free to marry or enter a civil partnership.</p>
13	Withdrawal Benefits on Leaving <i>At Least 2 Years' Total Reckonable Service</i> Preserved Benefits Increases Before Retirement Surviving Adult's Pension on Death in Deferment <i>Less than 2 Years' Total Reckonable Service</i>	As for Normal Retirement – from NRA Increases in line with the PI Act (currently CPI). 37.5% of member's deferred 2015 scheme pension + 5 x deferred 2015 scheme pension Refund of contributions or transfer option (if over 3 months' service)