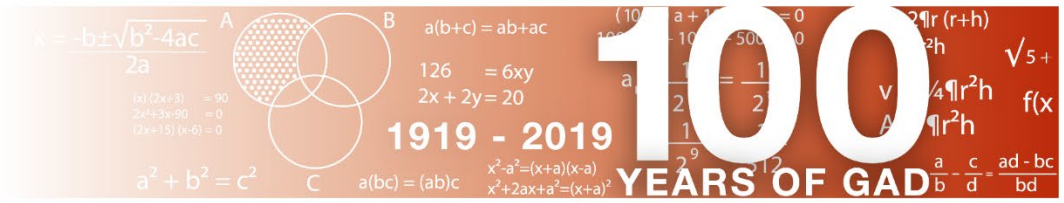
Government Actuary's Department



The Firefighters' Pension Scheme (Wales) 2015

Early payment reductions

Factors and guidance

Date: 28 November 2019

Table of Contents

1 Introduction **1**
2 Guidance on early payment reductions **4**
3 Examples **8**
Appendix A: Factor tables **11**
Appendix B: Principal assumptions underlying factors **12**
Appendix C: Limitations **13**

1 Introduction

1.1 This note is provided for Welsh Ministers as scheme manager of the Firefighters' Pension Schemes. This note relates to early payment reductions in accordance with Regulation 70 of the 2015 Scheme Regulations. It sets out the general method for assessing and applying:

- the actuarial reduction on early payment of pension (early payment reduction) when retiring early in normal health

1.2 The Welsh Ministers, as responsible authority under Schedule 2 paragraph 6 of the Public Service Pensions Act 2013 ('the responsible authority') are required under the Firefighters' Pension Scheme (Wales) Regulations 2015 ('the 2015 Scheme Regulations') (SI 2015/622(W.50)), to issue actuarial guidance on early payment reductions (Regulations 70(3) and (5) of the 2015 Scheme Regulations).

1.3 The scheme managers are required to apply early payment reductions (if any) under Regulation 68 (active members) and Regulation 69 (deferred members) of the 2015 Scheme Regulations.

1.4 This guidance relates only to benefits accrued under the 2015 Scheme Regulations. Some firefighters may also have benefits under the 1992 Scheme or the NFPS which should be dealt with separately according to relevant scheme guidance.

1.5 The factors provided in this note have been prepared in light of our advice to Welsh Ministers dated 30 October 2018 and its instructions following that advice.

1.6 The remainder of this introduction contains:

- Details of the implementation and future review of this guidance
- Statements about third party reliance

1.7 In the remainder of this note:

- Section 2 provides guidance on early payment reductions
- Section 3 sets out example calculations of early payment reductions
- Appendix A sets out the factor tables
- Appendix B sets out the principal assumptions underlying the factors contained in this guidance note.
- Appendix C sets out the limitations of the factors and this guidance

Implementation and review

1.8 The responsible authority is required to consult the scheme actuary before issuing actuarial guidance under the 2015 Scheme Regulations.

1.9 As part of this consultation the responsible authority has asked GAD, as scheme actuary, to recommend actuarial guidance in respect of the regulations detailed below. This document forms GAD's recommendation for the actuarial guidance required by these regulations.

1.10 This note has effect only when this guidance is issued by the responsible authority to scheme managers as defined in Regulation 4 of the 2015 Scheme Regulations, and is subject to the implementation instructions provided at that time.

1.11 The factors contained in this guidance note will apply from 24 January 2019. This implementation date has been determined by the welsh Government. The guidance will apply with immediate effect upon receipt of the respective guidance.

1.12 This guidance replaces the previous guidance dated 21 April 2015. Factors have been updated but the calculation methodology remains unchanged.

1.13 This guidance has been written for pension administrators and assumes some knowledge of general pension terminology, and some familiarity with retirement calculations for the Firefighters' Pension Scheme (Wales) 2015. Any questions concerning the application of the guidance should, in the first instance, be referred to the Firefighters' Pensions team at Welsh Government.

1.14 In line with best practice and in order to make sure that factors are being used as intended and the instructions are fit for purpose, we suggest that some example calculations are sent to GAD for review.

1.15 The factors contained in this guidance will be subject to review periodically. This will depend on external circumstances, for example whenever there is a change in the SCAPE basis; when changes in the actuarial assumptions adopted for other scheme factors take place; or following each future actuarial valuation where mortality and other relevant experience is reviewed or if other credible and material information comes to light.

1.16 Scheme managers and administrators should ensure that they use the latest factors in circulation.

Third party reliance

1.17 This guidance has been prepared for the use of the Welsh Government and the scheme administrators for the purposes of demonstrating the application of the factors covered by this guidance only. This guidance may be published on the Welsh Government and scheme administrator's website but must not otherwise be reproduced, distributed or communicated in whole or in part to any other person without GAD's prior written permission.

1.18 Other than the Welsh Government and the scheme administrators, no person or third party is entitled to place any reliance on the contents of this guidance, except to any extent explicitly stated herein. GAD has no liability to any person or third party for any action taken or for any failure to act, either in whole or in part, on the basis of this guidance, whether or not GAD has agreed to the disclosure of its advice to the third party.

2 Guidance on early payment reductions

Introduction

2.1 An early payment reduction applies to members who retire 'early' in normal health. Early means, for active 2015 scheme members those who retire before Normal Pension Age (NPA) and for deferred 2015 scheme members those who retire before reaching their State Pension Age (SPA).

2.2 This section refers to benefits reduced in accordance with regulation 70 of the Firefighters' Pension Scheme (Wales) Regulations 2015.

2.3 Guidance for calculating the early payment reduction applied to members retiring early from active service is set out in paragraphs 2.6 to 2.13 below.

2.4 Guidance for calculating the early payment reduction applied to members retiring early from deferred status is set out in paragraph 2.14 to 2.23 below.

2.5 Worked examples are provided in Section 3.

Members retiring from active service (Active member accounts)

2.6 Under regulation 60, the member's retirement account must specify the early payment reductions applying to each amount of retirement earned pension and retirement added pension.

Early payment reduction of earned pension

2.7 The early payment reduction applying to the retirement earned pension should be calculated using the following formula:

Early payment reduction = Retirement pension x $(1-F_A)$

where:

Retirement Pension is taken from the relevant active retirement account at the date of retirement and should include transferred in pension (see the definition in regulations 32 and 60).

F_A is the early payment reduction factor from **Table A** (Table 402 in the consolidated factor spreadsheet) in Appendix A, chosen by reference to the period to the active member's normal pension age. The period to normal pension age should be rounded **up** to the **next** month. Alternatively, the period is equal to normal pension age minus the age of the member in completed years and months.

Early payment reduction of added pension

2.8 The early retirement factor applying to the added pension account for active members is the early retirement factor applying to the deferred member account as set out in paragraph 2.17 but based on term to normal pension age.

2.9 The early payment reduction applying to the amount of added pension for active members can therefore be calculated using the following formula,

Early Payment Reduction = Added pension x $(1 - F_B)$

where,

Added pension is taken from the relevant active account at the date of retirement.

F_B is the early payment reduction factor from **Table B** (Table 403 in the consolidated factor spreadsheet) in Appendix A, chosen by reference to the member's normal pension age. The period to normal pension age should be rounded **up** to the **next** month. Alternatively, the period is equal to the normal pension age minus the age of the member in completed years and months.

2.10 For the avoidance of doubt, do not deduct any commutation amount from the amounts of retirement pension prior to carrying out the calculation in paragraph 2.7 and 2.9.

2.11 Pensions payable to a member's spouse, partner or dependant should not be reduced.

2.12 The member's annual rate of full retirement pension at retirement is then calculated, in accordance with regulation 68, by subtracting the early payment reductions from the member's full retirement pension specified in the member's retirement account (together with any reductions for commutation).

2.13 See example 1 in section 3 for an example of the calculation of an early retirement pension for an active member with added pension.

Members retiring from deferred status (Deferred member accounts)

2.14 Under regulation 55, the deferred member's account must specify the early payment reductions applying to each amount of deferred pension and deferred added pension.

2.15 The 2015 Scheme Regulations provide for a deferred pension to be payable without reduction for early payment from the higher of age 65 and the member's State Pension Age.

2.16 The responsible authority has confirmed that State Pension Age for the purpose of calculating early retirement factors should be as set out in HM Treasury Directions made in exercise of the powers conferred on them by sections 11(2) and 12(3) of the Public Service Pensions Act 2013[1].

Early payment reduction of deferred pension

2.17 The early payment reduction applying to the amount of deferred pension should be calculated using the following formula:

Early payment reduction = Deferred pension x (1 - F_B)

where:

Deferred Pension is taken from the relevant deferred retirement account at the date of retirement and should include transferred in pension (see the definition in regulations 32 and 69)

F_B is the early payment reduction factor from **Table B** (Table 403 in the consolidated factor spreadsheet) in Appendix A, chosen by reference to the period to a member's deferred pension age. The period to deferred pension age should be rounded **up** to the **next** month. Alternatively, the period is equal to the member's deferred pension age (in years and months) less the age of the member in completed years and months.

Early payment reduction of added pension

2.18 The early retirement factor applying to the added pension account for deferred members is the early retirement factor applying to the deferred member account as set out in paragraph 2.17 but in all cases including deferred members based on term to normal pension age.

2.19 The early payment reduction applying to the amount of added pension for deferred members can therefore be calculated using the following formula,

Early Payment Reduction = Added pension x (1 – $F_{B\ (added\ pen)}$)

where,

Added pension is taken from the relevant deferred retirement account at the date of retirement.

[1] A consolidated version of HM Treasury Directions dated 11 March 2014, including amendments made up to and including 27 November 2014, is found in the following link; SPA assumptions are set out at direction 18.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/318029/valuations_and_cost_cap_directions_final_020614.pdf
(As at the date of this guidance, later amending directions have not amended direction 18.)

$F_{B\ (added\ pen)}$ is the early payment reduction factor from **Table B** (Table 403 in the consolidated factor spreadsheet) in Appendix A, chosen by reference to the member's normal pension age. The period to normal pension age should be rounded **up** to the **next** month. Alternatively, the period is equal to the normal pension age minus the age of the member in completed years and months.

2.20 For the avoidance of doubt, do not deduct any commutation amount from the amounts of deferred pension prior to carrying out the calculation in paragraph 2.17 or 2.19.

2.21 Pensions payable to a member's spouse, partner or dependant should not be reduced.

2.22 The member's annual rate of full retirement pension at retirement is then calculated, in accordance with regulation 69, by subtracting the early payment reductions from each amount of deferred pension specified in the deferred member's account (together with any reductions for commutation).

2.23 See example 2 and 3 in section 3 for an example of the calculation of an early retirement pension for a deferred member with added pension.

3 Examples

Example 1: Early retirement for an active member with added pension

Member Details	
Date of birth	1 April 1970
Date of retirement	1 November 2025
Age at retirement (years and complete months)	55 years and 7 months
Period to NPA 60	4 years and 5 months

Retirement account details	
Retirement earned pension at retirement	£10,000 pa
Retirement added pension at retirement	£2,000 pa

Early retirement factors	
Retirement earned pension (4 years 5 months early)	F_A = 0.912 (from **Table A**)
Retirement added pension (4 years 5 months early)	F_B = 0.773 (from **Table B**)

Early payment reduction

As the member is retiring from active service the formula in paragraph 2.7 should be used for earned pension and the formula in paragraph 2.9 should be used for added pension.

Early payment reduction on retirement earned pension

= Retirement earned pension x $(1 - F_A)$

= £10,000 x (1 – 0.912)

= £10,000 x 0.088

= £880.00

The member's retirement earned pension should be reduced by £880.00 pa to £9,120.00 pa on retirement (prior to any allowance for commutation).

Early payment reduction on retirement added pension

= Retirement added pension x $(1 - F_B)$

= £2,000 x (1 – 0.773)

= £2,000 x 0.227

= £454.00

The member's retirement added pension should be reduced by £454.00 pa to £1,546.00 pa on retirement (prior to any allowance for commutation).

Any deductions for commutation should then be made in accordance with the scheme regulations.

Example 2: Early retirement for a deferred member with added pension retiring below age 60

Member Details

Date of birth	1 November 1968
Date of retirement	1 November 2025
Deferred Pension Age (earned pension)	67
Normal Pension Age (added pension)	60
Age at retirement (years and complete months)	57 years and 0 months
Period to NPA 60	3 year and 0 months
Period to NPA 67	10 years and 0 months

Retirement account details

Retirement earned pension at retirement	£10,000 pa
Retirement added pension at retirement	£1,000 pa

Early retirement factors

Retirement earned pension (10 years 0 months early) $F_B = 0.585$ (from **Table B**)
Retirement added pension (3 years 0 months early) $F_{B\ (added\ pen)} = 0.836$ (from **Table B**)

Early reduction payment

As the member is retiring from deferred status, the formula in paragraph 2.17 should be used for determining the deferred pension and the formula in paragraph 2.19 should be used for determining the deferred added pension .

Early payment reduction on deferred pension

= Deferred pension x $(1 - F_B)$

= £10,000 x (1 – 0.585)

= £10,000 x 0.415

= £4,150.00

The member's deferred pension should be reduced by £4,150.00 pa to £5,850.00 pa on retirement (prior to any allowance for commutation).

Early payment reduction on deferred added pension

= Deferred added pension x $(1 - F_{B\ (added\ pen)})$

= £1,000 x (1 – 0.836)

= £1,000 x 0.164

= £164.00

The member's deferred added pension should be reduced by £164.00 pa to £836.00 pa on retirement (prior to any allowance for commutation).

Any deductions for commutation should then be made in accordance with the scheme regulations.

Example 3: Early retirement for a deferred member with added pension retiring after age 60

Member Details

Date of birth	1 November 1967
Date of retirement	17 October 2030
Deferred Pension Age (earned pension)	67
Normal Pension Age (added pension)	60
Age at retirement (years and complete months)	62 years and 11 months
Period to NPA 67	4 years and 1 month (rounded up to next month)

Retirement account details

Retirement earned pension at retirement	£10,000 pa
Retirement added pension at retirement	£1,000 pa

Early retirement factors

Retirement earned pension (4 years 1 month early) F_B = 0.787 (from **Table B**)

Early payment reduction

As the member is retiring from deferred status, the formula in paragraph 2.17 should be used for determining the deferred pension and the formula in paragraph 2.19 should be used for determining the deferred added pension.

Early payment reduction on deferred pension

= Deferred pension x $(1 - F_B)$

= £10,000 x (1 – 0.787)

= £10,000 x 0.213

= £2,130.00

The member's deferred pension should be reduced by £2,130.00 pa to £7,870.00 pa on retirement (prior to any allowance for commutation).

Early payment reduction on deferred added pension

As the added pension element of the member's pension is payable without reduction from age 60, there is no early payment reduction to be applied. The member's deferred added pension is £1,000.

Any deductions for commutation should then be made in accordance with the scheme regulations.

Appendix A: Factor tables

Table A (Table 402 in consolidated factors spreadsheet): Early payment reduction factors for members retiring from active service– 2015 Scheme

Months	0	1	2	3	4	5	6	7	8	9	10	11
Years												
5	0.902	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	0.919	0.918	0.916	0.915	0.914	0.912	0.911	0.909	0.908	0.907	0.905	0.904
3	0.938	0.936	0.934	0.933	0.931	0.930	0.928	0.927	0.925	0.924	0.922	0.921
2	0.957	0.956	0.954	0.952	0.951	0.949	0.947	0.946	0.944	0.942	0.941	0.939
1	0.978	0.977	0.975	0.973	0.971	0.969	0.968	0.966	0.964	0.962	0.961	0.959
0	N/A	0.999	0.997	0.995	0.993	0.991	0.990	0.988	0.986	0.984	0.982	0.980

Table B (Table 403 in consolidated factors spreadsheet): Early payment reduction factors for members retiring from deferred status (also applicable to members retiring from active status or deferred status with added pension) – 2015 Scheme

Months	0	1	2	3	4	5	6	7	8	9	10	11
Years												
12	0.534	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	0.559	0.557	0.555	0.553	0.550	0.548	0.546	0.544	0.542	0.540	0.538	0.536
10	0.585	0.582	0.580	0.578	0.576	0.574	0.572	0.569	0.567	0.565	0.563	0.561
9	0.613	0.610	0.608	0.606	0.603	0.601	0.599	0.596	0.594	0.592	0.589	0.587
8	0.643	0.640	0.638	0.635	0.633	0.630	0.628	0.625	0.623	0.620	0.618	0.615
7	0.675	0.672	0.670	0.667	0.664	0.662	0.659	0.656	0.653	0.651	0.648	0.645
6	0.710	0.707	0.705	0.702	0.699	0.696	0.693	0.690	0.687	0.684	0.681	0.678
5	0.749	0.745	0.742	0.739	0.736	0.733	0.730	0.726	0.723	0.720	0.717	0.714
4	0.790	0.787	0.783	0.780	0.776	0.773	0.769	0.766	0.762	0.759	0.756	0.752
3	0.836	0.832	0.828	0.824	0.820	0.817	0.813	0.809	0.805	0.802	0.798	0.794
2	0.885	0.881	0.877	0.873	0.869	0.865	0.860	0.856	0.852	0.848	0.844	0.840
1	0.940	0.935	0.931	0.926	0.922	0.917	0.913	0.908	0.904	0.899	0.894	0.890
0	N/A	0.995	0.990	0.985	0.980	0.975	0.970	0.965	0.960	0.955	0.950	0.945

Appendix B: Principal assumptions underlying factors

Financial assumptions

Nominal discount rate	4.448%
CPI	2.00%
Real discount rate (in excess of CPI)	2.40%

Mortality assumptions

Base mortality tables and adjustments	113% of S2NMA for males and 113% of S2NFA for females (as per 2016 valuation)
Future mortality improvement	Based on ONS principal UK population projections 2016
Year of use	2020

Other assumptions

Proportion of male members for the unisex factors	95%
Allowance for commutation	Nil

Appendix C: Limitations

C.1 This guidance should not be used for any purpose other than those set out in this guidance.

C.2 The factors contained in this guidance are subject to regular review. Scheme managers and administrators need to ensure that they are using the latest factors, as relevant, when processing cases.

C.3 Advice provided by GAD must be taken in context and is intended to be considered in its entirety. Individual sections, if considered in isolation, may be misleading, and conclusions reached by a review of some sections on their own may be incorrect. GAD does not accept responsibility for advice that is altered or used selectively. Clarification should be sought if there is any doubt about the intention or scope of advice provided by GAD.

C.4 This guidance only covers the actuarial principles around the calculation and application of early payment reduction factors. Any legal advice in this area should be sought from an appropriately qualified person or source.

C.5 Scheme managers and administrators should satisfy themselves that early payment reduction calculations and benefit awards comply with all legislative requirements including, but not limited to, tax and contracting-out requirements.

C.6 This guidance is based on the Regulations in force at the time of writing. It is possible that future changes to the Regulations might create inconsistencies between this guidance and the Regulations. If users of this guidance believe there to be any such inconsistencies, they should bring this to the attention of the Welsh Government and GAD. Under no circumstances should this guidance take precedence over the Regulations. Administrators should ensure that they comply with all relevant Regulations.