



Scottish Teachers' Superannuation Scheme Scottish Teachers' Pension Scheme 2015

Early retirements in normal health

Factors and guidance

Version: Issued

Date: 20 June 2019



Contents

1	Introduction	1
2	Early retirement with actuarial reduction – STSS	3
3	Examples – STSS	8
4	Early retirement with actuarial reduction – STPS	13
5	Examples – STPS	16
Аp	ppendix A: Regulations to which this document relates and correspo	onding factors 22
Аp	ppendix B: Early retirement factor tables – STSS	24
Аp	ppendix C: Early retirement factor tables – STPS	30
Аp	ppendix D: Principal assumptions underlying factors	33
Αp	ppendix E: Limitations	34



1 Introduction

- 1.1 This note is provided for the Scottish Public Pensions Agency (SPPA) as scheme manager of the Scottish Teachers' Superannuation Scheme (STSS) and the Scottish Teachers' Pension Scheme 2015 (STPS) and sets out how to determine the appropriate reduction to be applied to a member's benefits when retiring early in normal health.
- 1.2 This guidance is intended to supersede any factors or advice previously issued, for the purposes of early retirement calculations, which rely on input from the Scheme Actuary. In particular, this guidance supersedes *Scottish Teachers' Superannuation Scheme: Early retirements in normal health: Factors and guidance* dated 15 June 2015.
- 1.3 The factors provided in this note have been prepared in light of our advice to SPPA dated 5 March 2018 and 30 October 2018 and its instructions following that advice.
- 1.4 Details of the principal assumptions underlying the factor tables in this guidance are set out in Appendix D.
- 1.5 The regulations to which this document relates, and the corresponding factors provided, are set out in Appendix A.
- 1.6 A member may have benefits in both the STSS and the STPS. For the purposes of calculating a member's early retirement pension before any commutation option is exercised, the member's STSS early retirement pension and STPS early retirement pension should be calculated separately using the relevant parts of this guidance.

Exclusions

1.7 This note covers early retirements in normal health only. In particular, this note does not cover enhancements to be applied in the cases of early retirement in ill health.

Implementation and review

- 1.8 The factors set out in Appendix B of this guidance note relate to the Scottish Teachers' Superannuation Scheme. SPPA have determined that these factors are to be implemented from 29 October 2018. The factors set out in Appendix C of this note relate to the Scottish Teachers' Pension Scheme 2015. GAD have determined that these factors are to be implemented from 21 December 2018. This guidance will apply from the date issued on the cover.
- 1.9 Factors have been updated but the calculation methodology remains unchanged.
- 1.10 This guidance has been written for pension administrators and assumes some knowledge of general pension terminology, and some familiarity with retirement calculations for the Scottish Teachers' Pension Scheme. Any questions concerning the application of the guidance should, in the first instance, be referred to SPPA.

- 1.11 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.
- 1.12 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.
- 1.13 The remainder of this note covers the factor tables, guidance on their use and a number of worked examples. These are provided separately for the STSS and the STPS.

Third party reliance

- 1.14 This guidance has been prepared for the use of SPPA 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 SPPA and the 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.
- 1.15 Other than SPPA 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 Early retirement with actuarial reduction - STSS

General information

- 2.1 These factors are used to reduce the benefits of STSS members who wish to retire before their normal pension age (NPA).
- 2.2 This section refers only to benefits payable in accordance with Regulations E6A, E7, E7A, E8, F10B and J6B of the Teachers' Superannuation (Scotland) Regulations 2005 (SSI 2005/393), that is those Regulations relating to the early payment of main scheme benefits, Additional Pension and pension credits of STSS members.
- 2.3 The benefits payable on early retirement are determined by applying the appropriate reduction factor to the accrued benefit entitlement(s) at the date of retirement using the formula below and factors in the Appendix B.
- 2.4 Worked examples are provided in Section 3.

Pre-2007 entrants (NPA 60 members) Active or deferred members below age 60 at retirement

2.5 Early retirement pension =

Main scheme pension x Factor ER1

- + Additional Pension (option exercised before 1 April 2011) x Factor ER2
- Additional Pension (option exercised on or after 1 April 2011) x Factor ER3
- pension debit(s) pension x Factor ER1
- 2.6 Early retirement lump sum =

Main scheme lump sum x Factor ER1

- pension debit(s) lump sum x Factor ER1
- 2.7 Points to note in using the factors:
 - Main scheme pension and lump sum includes any transferred-in and added years' pension and lump sum.
 - Additional Pension and pension debits need to be revalued to the date of retirement.
 - The early retirement factors should be selected with reference to a member's age at retirement (in years and complete months).
 - Reduced benefits should be calculated before any commutation option is exercised.

Pre-2007 entrants (NPA 60 members) Active members aged between 60 and 65 at retirement with NPA 65 Additional Pension

- 2.8 Pre-2007 entrants (i.e. NPA 60 members) who have already reached the age of 60 can purchase Additional Pension with a normal pension age of 65. Where the Additional Pension comes into payment before age 65, it should be reduced for early payment by multiplying by the appropriate factor from Table ER5 (where the option was exercised before 1 April 2011) or Table ER6 (where the option was exercised on or after 1 April 2011).
- 2.9 No adjustments for early retirement are to be made to other elements of the pension.

2007 or later entrants (NPA 65 members) Early retirement of active or deferred members

2.10 Early retirement pension =

Main scheme pension x Factor ER4

- + Additional Pension (option exercised before 1 April 2011) x Factor ER5
- + Additional Pension (option exercised on or after 1 April 2011) x Factor ER6
- pension debit(s) pension x Factor ER4
- 2.11 Points to note in using the factors:
 - Main scheme pension includes any transferred-in service.
 - Additional Pension and pension debits need to be revalued to the date of retirement.
 - The early retirement factors should be selected with reference to a member's age at retirement (in years and complete months).
 - Reduced benefits should be calculated before any lump sum commutation option is exercised.



Persons with mixed service Early retirement of active or deferred members

2.12 Early retirement pension =

Main scheme pension (where NPA is 60) x Factor ER1

- + Main scheme pension (where NPA is 65) x Factor ER4
- Additional Pension (option exercised before 1 April 2011 where NPA is 60)
 x Factor ER2
- Additional Pension (option exercised before 1 April 2011 where NPA is 65)
 x Factor ER5
- Additional Pension (option exercised on or after 1 April 2011 where NPA is 60)
 x Factor ER3
- Additional Pension (option exercised on or after 1 April 2011 where NPA is 65)
 x Factor ER6
- pension debit(s) pension (where NPA is 60) x Factor ER1
- pension debit(s) pension (where NPA is 65) x Factor ER4

2.13 Early retirement lump sum =

Main scheme lump sum x Factor ER1

pension debit(s) lump sum x Factor ER1

2.14 Points to note in using the factors:

- Main scheme pension and lump sum includes any transferred-in and added years' pension and lump sum with the appropriate NPA.
- Additional Pension and pension debits need to be revalued to the date of retirement.
- The early retirement factors should be selected with reference to a member's age at retirement (in years and complete months).

Reduced benefits should be calculated before commutation option is exercised. Allowance for pension debits

2.15 The formulae set out above make explicit allowance for pension debits (which includes annual allowance debits). The pension debits are also reduced to reflect that the pension debit will be in effect for a longer period.

Pension credit members

2.16 Early retirement reductions apply to pension credit members dependent on their NPA. For credit members with NPA 60, the calculation is the same as for a pre-2007 entrant ignoring pension debits and additional pension (paragraph 2.5 and, if a lump sum is payable, paragraph 2.6). For credit members with NPA 65, the calculation is the same as for a 2007 or later entrant (paragraph 2.10).

Eligibility for actuarially reduced early retirement

- 2.17 Actuarially reduced early retirement is not allowed if the reduced main scheme pension in respect of service given on or after 6 April 1978 and on or before 5 April 1997 is expected to be less than a member's guaranteed minimum pension (GMP) at GMP payment age (65 for males and 60 for females).
- 2.18 GMP data is not routinely held by the administrator. Where GMP data is not held, an initial test as described in paragraph 2.19 should be carried out to decide which cases require further investigation. The test in paragraph 2.22 can be carried out directly if GMP data is held.
- 2.19 If the following condition holds then the scheme pension is expected to be greater than the GMP at GMP payment age and no further investigation is required.

$$\frac{\text{final average salary}}{\text{highest FTE salary in the GMP accrual period} \times \text{PI}} > 1.2$$

where:

- final average salary is that used to determine the amount of the scheme benefits
- highest full-time equivalent (FTE) salary in the GMP accrual period is the highest FTE salary attained between 6 April 1978 and 5 April 1997
- PI is the pension increase multiplier for the period between (i) the date on which the member first earned the highest FTE salary in the GMP accrual period and (ii) the date which the final average salary relates to.
- 2.20 If the condition in paragraph 2.19 does not hold then the following test should be applied to check whether a member is eligible for actuarially reduced early retirement.
- 2.21 The GMP test is applied to the reduced value of the pension after a member has exercised any commutation option. It may be therefore that actuarially reduced early retirement is permitted but only if no pension is commuted.

2.22 The GMP test is set out below:

- Calculate the pension in relation to service before 6 April 1997, excluding any added years but including any (pre-97) transferred-in service and apply the relevant early retirement factor and the reduction for the proposed level of commutation.
- Take revalued annual GMP at date of retirement and apply the relevant factor from the following table.

Number of tax years commencing before GMP payable	Factor
1	1.020
2	1.045
3	1.065
4	1.090
5	1.115
6	1.140
7	1.165
8	1.190
9	1.215
10	1.245

• Early retirement is permitted if the reduced pension is greater than the GMP multiplied by the factor.

3 Examples – STSS

- 3.1 This section sets out a number of worked examples to help illustrate how the factors should be applied for retirements from the STSS. The examples covered are as follows:
 - **A.** Early retirement of a pre-2007 entrant (NPA 60 member) with a NPA 60 Additional Pension contract exercised on or after 1 April 2011
 - **B.** Early retirement of a pre-2007 entrant (NPA 60 member) with a NPA 60 Additional Pension contract exercised before 1 April 2011
 - **C.** Pre-2007 entrant (NPA 60 member) with a NPA 65 Additional Pension contract exercised on or after 1 April 2011, retiring before age 65
 - **D.** Early retirement of a 2007 or later entrant (NPA 65 member) with an annual allowance debit
- 3.2 In all examples, the member is assumed to be eligible for early retirement.



Example A

Early retirement of a pre-2007 entrant (NPA 60 member) with a NPA 60 Additional Pension contract exercised on or after 1 April 2011

Member Details

NPA 60 Sex Male

Date of birth 1 January 1965
Date of retirement 1 August 2020

Age at retirement (years and complete months) 55 years and 7 months

Pension at retirement £2,000 pa Lump sum at retirement £6,000

NPA of Additional Pension (AP) 60

Date of AP election 1 September 2011

Amount of AP purchased £500 pa

Pension

Main scheme pension

Factor table ER1
Pension factor 0.828

Reduced main scheme pension = Accrued main scheme pension x ER1

= £2,000 x 0.828 = £1,656.00 pa

Additional pension

Factor table ER3
Pension factor 0.818

Reduced additional pension = Paid-up additional pension x ER3

= £500 x 0.818 = £409.00 pa

Total reduced pension = £1,656.00 + £409.00 = £2,065.00 pa

Lump Sum

Main scheme lump sum

Factor table ER1 Lump sum factor 0.828

Reduced lump sum = Accrued main scheme lump sum x ER1

= £6,000 x 0.828 = £4,968.00



Example B

Early retirement of a pre-2007 entrant (NPA 60 member) with a NPA 60 Additional Pension contract exercised before 1 April 2011

Member Details

NPA 60 Sex Female

Date of birth 1 December 1962
Date of retirement 1 April 2020

Age at retirement (years and complete months) 57 years and 4 months

Pension at retirement £4,500 pa Lump sum at retirement £13,500

NPA of Additional Pension (AP) 60

Date of AP election 21 June 2006 Amount of AP purchased £1,500 pa

Pension

Main scheme pension

Factor table ER1
Pension factor 0.891

Reduced main scheme pension = Accrued main scheme pension x ER1

= £4,500 x 0.891 = £4,009.50 pa

Additional pension

Factor table ER2
Pension factor 0.911

Reduced additional pension = Paid-up additional pension x ER2

= £1,500 x 0.911 = £1,366.50 pa

Total reduced pension = £4,009.50 + £1,366.50 = £5,376.00

Lump Sum

Main scheme lump sum

Factor table ER1 Lump sum factor 0.891

Reduced lump sum = Accrued main scheme lump sum x ER1

= £13,500 x 0.891 = £12,028.50



Example C

Pre-2007 entrant (NPA 60 member) with a NPA 65 Additional Pension contract exercised on or after 1 April 2011, retiring before age 65

Member Details

NPA 60 Sex Male

Date of birth 25 July 1960
Date of retirement 22 August 2021

Age at retirement (years and complete months) 61 years and 0 months

Pension at retirement £6,000 pa Lump sum at retirement £18,000

NPA of Additional Pension (AP) 65

Date of AP election 1 September 2014

Amount of AP purchased £1,500 pa

Pension

Main scheme pension

Factor table n/a
Pension factor n/a

Main scheme pension = Accrued main scheme pension

= £6,000.00 pa

Additional pension

Factor table ER6
Pension factor 0.813

Reduced additional pension = Paid-up additional pension x ER6

= £1,500 x 0.813 = £1,219.50 pa

Total reduced pension = £6,000.00 + £1,219.50 = £7,219.50

Lump Sum

Main scheme lump sum

Factor table n/a Lump sum factor n/a

Lump sum = Accrued main scheme lump sum

= £18,000.00



Example D

Early retirement of a 2007 or later entrant (NPA 65 member) with an annual allowance debit

Member Details

NPA 65
Sex Female
Date of birth 1 March 1959
Date of retirement 1 August 2020

Age at retirement (years and complete months) 61 years and 5 months

Pension at retirement £4,500 pa Annual allowance debit at retirement £200 pa

Pension

Main scheme pension

Factor table ER4
Pension factor 0.831

Reduced main scheme pension = Accrued main scheme pension x ER4

= £4,500 x 0.831 = £3,739.50 pa

Annual allowance debit

Factor table ER4
Pension factor 0.831

Reduced annual allowance debit = Annual allowance debit x ER4

= £200 x 0.831 = £166.20 pa

Total reduced pension = £3,739.50 - £166.20 = £3,573.30 pa



4 Early retirement with actuarial reduction – STPS

General information

- 4.1 These factors are used to reduce the benefits of STPS members who wish to retire before their normal pension age.
- 4.2 This section refers only to benefits payable in accordance with Regulations 73, 74, 77, 93, 99, 102 153, and 176 of the Teachers' Pension Scheme (Scotland) (No.2) Regulations 2014 (SSI 2014/292), that is those Regulations relating to the early payment of full retirement earned pension benefits, Additional Pension and pension credits of STPS members.
- 4.3 For members retiring early from active service, the standard reduction of 3% a year applies for a maximum of 3 years between age 65 and a member's normal pension age. However, members do have the option to pay contributions to buy out the standard reduction ("buy-out election") for a period of up to 3 years.
- 4.4 SPPA have determined that in cases where the standard reduction is to be applied for a non-integer number of years, it is to be calculated as a reduction of 0.25% for each complete month between age 65 (or the member's age at retirement, if later) and the member's normal pension age, up to a maximum of 36 months.
- 4.5 The benefits payable on early retirement from active service are determined by applying the standard reduction (if any) and the appropriate reduction factor (if required) to the accrued benefit entitlement at the date of retirement using the formula in paragraph 4.8 below and factors in the Appendix C.
- 4.6 The benefits payable on early retirement from deferred status are determined by applying the appropriate reduction factor to the accrued benefit entitlement at the date of retirement using the formula in paragraph 4.10 below and factors in the Appendix C. An adjustment to the early retirement reduction is required for those members who made a buy-out election. The formula in paragraph 4.12 should be used for any part of a deferred member's pension that is subject to a buy-out election.
- 4.7 Worked examples are provided in Section 5.



Active members

4.8 Early retirement pension =

Full retirement earned pension x standard reduction x Factor ER7

- + Additional Pension x Factor ER8
- pension debit(s) pension x Factor ER8

4.9 Points to note in using the factors:

- Full retirement earned pension includes any transferred-in pension and any extra pension purchased through a faster accrual election.
- Additional Pension and pension debits need to be revalued to the date of retirement.
- The standard reduction should be adjusted accordingly if a member has made a buy-out election. If a member revokes, or is taken to revoke, the buy-out election, the election only applies to the pension accrued before the date of the revocation. In such cases, separate calculations are required for the elements of the pension which are and are not covered by the buy-out election, with the total pension payable being the sum of these separate calculations.
- Factor ER7 should be selected with reference to a member's age at retirement (in years and complete months).
- Factor ER8 should be selected with reference to the period to a member's NPA (in years and months, with part months rounded up to the nearest month).
- Reduced benefits should be calculated before commutation option is exercised.

Deferred members – pension not subject to a buy-out election

4.10 Early retirement pension =

Full retirement earned pension x Factor ER8

- + Additional Pension x Factor ER8
- pension debit(s) pension x Factor ER8

4.11 Points to note in using the factors:

- Full retirement earned pension includes any transferred-in pension and any extra pension purchased through a faster accrual election.
- Additional Pension and pension debits need to be revalued to the date of retirement.
- Factor ER8 should be selected with reference to the period to a member's NPA (in years and months, with part months rounded up to the nearest month).
- Reduced benefits should be calculated before commutation option is exercised.



Deferred members - pension subject to a buy-out election

4.12 Early retirement pension =

Full retirement earned pension x [Factor ER8 + standard reduction x N x Factor ER9]

- + Additional Pension x Factor ER8
- pension debit(s) pension x Factor ER8

where standard reduction is 0.03.

where N is the minimum of:

- the number of years for which the standard reduction has been bought out; and
- the period to the member's NPA (in years and months, with part months rounded up to the nearest month) minus ¹/₂₄.

4.13 Points to note in using the factors:

- Full retirement earned pension includes any extra pension purchased through a faster accrual election which is also subject to a buy-out election.
- Additional Pension and pension debits need to be revalued to the date of retirement.
- If a member revokes, or is taken to revoke, the buy-out election, the election only applies to the pension accrued before the date of the revocation. In such cases, separate calculations are required for the elements of the pension which are and are not covered by the buy-out election. The former is covered by paragraph 4.12 and the latter by paragraph 4.10, with the total pension payable being the sum of these separate calculations.
- Factor ER8 should be selected with reference to the period to a member's NPA (in years and months, with part months rounded up to the nearest month).
- Factor ER9 should be selected with reference to a member's age at retirement (in years and complete months).
- Reduced benefits should be calculated before commutation option is exercised.

Allowance for pension debits

4.14 The formulae set out above make explicit allowance for pension debits (which includes annual allowance debits). The pension debits are also reduced to reflect that the pension debit will be in effect for a longer period.

Pension credit members

4.15 Early retirement reductions apply to pension credit members. Calculation of the early retirement pension for pension credit members follows the same process outlined above for STPS deferred members who did not make a buy-out election (paragraph 4.10).



5 Examples - STPS

- 5.1 This Section sets out a number of worked examples to help illustrate how the factors should be applied for retirements from the STPS. The examples covered are as follows:
 - **E.** Early retirement of an active member with an Additional Pension contract and a pension debit from a pension sharing order on divorce
 - F. Early retirement of an active member who made a buy-out election
 - **G.** Early retirement of a deferred member who did not make a buy-out election
 - **H.** Early retirement of a deferred member who made a buy-out election
- 5.2 In all examples, the member is assumed to be eligible for early retirement.



Example E

Early retirement - Active member with an Additional Pension contract and a pension debit from a pension sharing order on divorce

Member Details

NPA 66 Sex Male

Date of birth

Date of retirement

Age at retirement (years and complete months)

Period to NPA (rounded up to the nearest month)

1 April 1960

1 November 2020

60 years and 7 months

5 years and 5 months

Full retirement earned pension at retirement £2,000 pa Amount of AP purchased £500 pa Pension debit at retirement £800 pa

Standard reduction (for age 65 to 66) 3% (or 0.03)

Pension

As the member is retiring from active service the formula in paragraph 4.8 should be used.

Full retirement earned pension

Factor table ER7
Pension factor 0.797

Reduced pension = Full retirement earned pension x standard reduction x Factor ER7

=£2,000 x (1 - 0.03) x 0.797

=£1,546.18 pa

Additional Pension

Factor table ER8
Pension factor 0.748

Reduced AP = Paid-up Additional Pension x Factor ER8

 $= £500 \times 0.748$ = £374.00 pa

Pension debit

Factor table ER8
Pension factor 0.748

Reduced pension debit = Pension debit x Factor ER8

 $= £800 \times 0.748$ = £598.40 pa

Total reduced pension = £1,546.18 + £374.00 - £598.40 = £1,321.78



Example F

Early retirement - Active member who made a buy-out election

Member Details

NPA 66 Sex Female

Date of birth 1 September 1957
Date of retirement 1 September 2020
Age at retirement (years and complete months) 63 years and 0 months

Full retirement earned pension at retirement:

Subject to the buy-out election £1,000 pa Not subject to the buy-out election £3,000 pa Total £4,000 pa

Standard reduction (for age 65 to 66) 3% (or 0.03)

Number of years for which the standard

reduction has been bought out 1

On joining the STPS the member elected to buy-out the standard reduction applying for 1 year. However, the member revoked this option before their retirement date. £1,000 of the full retirement earned pension relates to the period during which the buy-out election was in force and £3,000 relates to the period after the buy-out election was revoked.

Pension

As the member is retiring from active service the formula in paragraph 4.8 should be used.

Full retirement earned pension subject to the buy-out election

Factor table ER7
Pension factor 0.900

Reduced pension = Full retirement earned pension x standard reduction x Factor ER7

=£1,000 x 1 x 0.900

=£900.00 pa

Full retirement earned pension not subject to the buy-out election

Factor table ER7
Pension factor 0.900

Reduced pension = Full retirement earned pension x standard reduction x Factor ER7

=£3,000 x (1 - 0.03) x 0.900

=£2,619.00 pa

Total reduced pension = £900.00 + £2,619.00 = £3,519.00



Example G

Early retirement - Deferred member who did not make a buy-out election

Member Details

NPA 66 Sex Male

Date of birth 1 March 1958 Date of retirement 5 June 2020

Period to NPA (rounded up to the nearest month) 3 years and 9 months

Pension at retirement £5,000 pa

Pension

As the member is retiring from deferred service and did not make a buy-out election, the formula in paragraph 4.10 should be used.

Full retirement earned pension

Factor table ER8
Pension factor 0.815

Reduced pension = Full retirement earned pension x Factor ER8

=£5,000 x 0.815

= £4,075.00 pa



Example H

Early retirement - Deferred member who made a buy-out election

Member Details

NPA 66 Sex Female

Date of birth

Date of retirement

Age at retirement (years and complete months)

Period to NPA (rounded up to the nearest month)

1 November 1959
1 November 2021
62 years and 0 months
4 years and 0 months

Full retirement earned pension at retirement:

Subject to the buy-out election £1,500 pa Not subject to the buy-out election £1,000 pa Total £2,500 pa

Standard reduction (for age 65 to 66) 3% (or 0.03)

Number of years for which the standard

reduction has been bought out 1

On joining the STPS the member elected to buy-out the standard reduction applying for 1 year. However, the member revoked this option before leaving active service. £1,500 of the full retirement earned pension relates to the period during which the buy-out election was in force and £1,000 relates to the period after the buy-out election was revoked.

Pension

Full retirement earned pension subject to the buy-out election

As the member is retiring from deferred service the formula in paragraph 4.12 should be used for that part of the member's pension that is subject to the buy-out election.

Reduced pension = Full retirement earned pension x [Factor ER8 + standard reduction x N x Factor ER9]

where N is the minimum of:

- the number of years for which the standard reduction has been bought out; and
- the period to the member's NPA (in years and months, with part months rounded up to the nearest month) minus ¹/₂₄.

Factor table ER8
Pension factor 0.804

N = minimum of $(1, 4 - \frac{1}{24})$

= minimum of (1, $3^{23}/_{24}$)

= 1

Factor table ER9
Pension factor 0.855
Standard reduction 0.03



Reduced pension = Full retirement earned pension x [Factor ER8 + standard reduction x N x Factor ER9]

$$=$$
£1,500 x [0.804 + 0.03 x 1 x 0.855]

=£1,244.48 pa

Full retirement earned pension not subject to the buy-out election

As the member is retiring from deferred service the formula in paragraph 4.10 should be used for that part of the member's pension that is not subject to the buy-out election.

Factor table ER8
Pension factor 0.804

Reduced pension = Full retirement earned pension x Factor ER8

=£1,000 x 0.804

=£804.00 pa

Total reduced pension = £1,244.48 + £804.00 = £2048.48 pa



Appendix A: Regulations to which this document relates and corresponding factors

STSS: The Teachers' Superannuation (Scotland) Regulations 2005 – SSI 2005/393

Factor Table Number	Regulations
ER1 (Spreadsheet table number 401)	E6A Eligibility for payment of phased retirement benefits
pension and lump sum reduction factorsNormal Pension Age (NPA) 60	E7 Amount of retirement pension
applicable to NPA 60 main scheme pension and lump	E8 Amount of retirement lump sum
 sum, including any pension debits retirement from active or deferred status 	E13 Pension debit member
Tethement from active of deferred status	F10B Pension credit retirement benefits before attaining normal benefit age (with actuarial reduction)
	J6B Reduction of benefits: annual allowance and lifetime allowance charge
ER2 (Spreadsheet table number 402)pension reduction factors	E6A Eligibility for payment of phased retirement benefits
NPA 60	E7A Retirement pension when election
applicable to NPA 60 Additional Pension (contracts exercised before 1 April 2011)	has been made under regulation C4B
ER3 (Spreadsheet table number 403)	E6A Eligibility for payment of phased retirement benefits
 pension reduction factors NPA 60 applicable to NPA 60 Additional Pension (contracts exercised on or after 1 April 2011) 	E7A Retirement pension when election has been made under regulation C4B
ER4 (Spreadsheet table number 404)	E6A Eligibility for payment of phased retirement benefits
pension reduction factorsNPA 65	E7 Amount of retirement pension
applicable to NPA 65 main scheme pension,	E13 Pension debit member
 including any pension debits retirement from active or deferred status 	F10B Pension credit retirement benefits before attaining normal benefit age (with actuarial reduction)
	J6B Reduction of benefits: annual allowance and lifetime allowance charge
ER5 (Spreadsheet table number 405)	E6A Eligibility for payment of phased retirement benefits
 pension reduction factors NPA 65 applicable to NPA 65 Additional Pension (contracts exercised before 1 April 2011) 	E7A Retirement pension when election has been made under regulation C4B



ER6 (Spreadsheet table number 406) • pension reduction factors	E6A Eligibility for payment of phased retirement benefits
 NPA 65 applicable to NPA 65 Additional Pension (contracts exercised on or after 1 April 2011) 	E7A Retirement pension when election has been made under regulation C4B

STPS: The Teachers' Pension Scheme (Scotland) (No. 2) Regulations 2014 SSI 2014/292

Factor Table Number	Regulations
 ER7 (Spreadsheet table number 407) pension reduction factors all NPAs applicable to STPS pension retirement from active status only 	73 Pension accounts for active or deferred members who become pensioner members 74 Pension accounts for phased retirement members 93 Annual rate of phased retirement pension 99 Annual rate of premature retirement pension 102 Annual rate of early retirement pension
 ER8 (Spreadsheet table number 408) pension reduction factors all NPAs applicable to STPS pension retirement from deferred status – full retirement earned pension retirement from active or deferred status - Additional Pension and pension debits retirement of a pension credit member 	73 Pension accounts for active or deferred members who become pensioner members 74 Pension accounts for phased retirement members 77 Pension credit member's pension account 93 Annual rate of phased retirement pension 99 Annual rate of premature retirement pension 102 Annual rate of early retirement pension 153 Annual rate of pension credit retirement pension 176 Reduction of benefits: annual allowances and lifetime allowance charge
 ER9 (Spreadsheet table number 409) pension reduction factors all NPAs applicable to STPS pension retirement from deferred status – pension subject to a buy-out election 	73 Pension accounts for active or deferred members who become pensioner members 102 Annual rate of early retirement pension



Appendix B: Early retirement factor tables - STSS

Table ER1 - STSS, NPA 60, Main Scheme Pension and Lump Sum

Age						Complete	d Months					
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.808	0.811	0.814	0.817	0.819	0.822	0.825	0.828	0.831	0.834	0.836	0.839
56	0.842	0.845	0.848	0.851	0.854	0.857	0.860	0.863	0.866	0.869	0.872	0.875
57	0.878	0.882	0.885	0.888	0.891	0.894	0.898	0.901	0.904	0.907	0.910	0.914
58	0.917	0.920	0.924	0.927	0.931	0.934	0.937	0.941	0.944	0.948	0.951	0.954
59	0.958	0.962	0.965	0.969	0.973	0.976	0.980	0.984	0.987	0.991	0.995	0.998
60	1.000											

- 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 60 main scheme benefits
- 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
- 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised



Table ER2 - STSS, NPA 60, Additional Pension, contract exercised before 1 April 2011

Age						Complet	ed Months					
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.843	0.845	0.848	0.850	0.852	0.855	0.857	0.859	0.862	0.864	0.866	0.868
56	0.871	0.873	0.876	0.878	0.881	0.883	0.886	0.888	0.890	0.893	0.895	0.898
57	0.900	0.903	0.906	0.908	0.911	0.913	0.916	0.919	0.921	0.924	0.926	0.929
58	0.932	0.935	0.937	0.940	0.943	0.946	0.949	0.951	0.954	0.957	0.960	0.963
59	0.965	0.968	0.971	0.974	0.977	0.980	0.983	0.986	0.989	0.992	0.995	0.998
60	1.000											

- 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 60 Additional Pension where contracts were exercised before 1 April 2011
- 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
- 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised
- 4) Factors allow for increases based on RPI before coming into payment and PI Act increases in payment



Table ER3 - STSS, NPA 60, Additional Pension, contract exercised on or after 1 April 2011

Age						Complete	d Months					
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.798	0.801	0.803	0.806	0.809	0.812	0.815	0.818	0.821	0.824	0.827	0.830
56	0.833	0.836	0.839	0.843	0.846	0.849	0.852	0.855	0.858	0.861	0.865	0.868
57	0.871	0.874	0.878	0.881	0.884	0.888	0.891	0.895	0.898	0.901	0.905	0.908
58	0.912	0.915	0.919	0.922	0.926	0.930	0.933	0.937	0.941	0.944	0.948	0.951
59	0.955	0.959	0.963	0.967	0.971	0.975	0.979	0.982	0.986	0.990	0.994	0.998
60	1.000											

- 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 60 Additional Pension where contracts were exercised on or after 1 April 2011
- 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
- 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised
- 4) Factors allow for increases based on the PI Act both prior to and in payment



Table ER4 – STSS, NPA 65, Main Scheme Pension

Age						Complete	ed Months					
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.619	0.621	0.623	0.625	0.628	0.630	0.632	0.634	0.637	0.639	0.641	0.643
56	0.646	0.648	0.651	0.653	0.655	0.658	0.660	0.663	0.665	0.667	0.670	0.672
57	0.675	0.677	0.680	0.683	0.685	0.688	0.690	0.693	0.695	0.698	0.701	0.703
58	0.706	0.709	0.711	0.714	0.717	0.720	0.722	0.725	0.728	0.731	0.733	0.736
59	0.739	0.742	0.745	0.748	0.751	0.754	0.757	0.760	0.763	0.766	0.769	0.772
60	0.775	0.778	0.781	0.785	0.788	0.791	0.794	0.797	0.801	0.804	0.807	0.810
61	0.813	0.817	0.820	0.824	0.827	0.831	0.834	0.838	0.841	0.845	0.848	0.852
62	0.855	0.859	0.863	0.866	0.870	0.874	0.878	0.881	0.885	0.889	0.893	0.896
63	0.900	0.904	0.908	0.912	0.916	0.921	0.925	0.929	0.933	0.937	0.941	0.945
64	0.949	0.954	0.958	0.962	0.967	0.971	0.976	0.980	0.985	0.989	0.993	0.998
65	1.00											

- 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 65 main scheme benefits
- 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
- 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised



Table ER5 - STSS, NPA 65, Additional Pension, contract exercised before 1 April 2011

Age						Complete	ed Months					
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.692	0.693	0.695	0.697	0.699	0.701	0.703	0.705	0.706	0.708	0.710	0.712
56	0.714	0.716	0.718	0.720	0.722	0.724	0.726	0.728	0.730	0.732	0.734	0.736
57	0.738	0.740	0.742	0.744	0.746	0.748	0.750	0.752	0.754	0.757	0.759	0.761
58	0.763	0.765	0.767	0.770	0.772	0.774	0.776	0.779	0.781	0.783	0.785	0.788
59	0.790	0.792	0.795	0.797	0.800	0.802	0.805	0.807	0.809	0.812	0.814	0.817
60	0.819	0.822	0.824	0.827	0.829	0.832	0.835	0.837	0.840	0.842	0.845	0.848
61	0.850	0.853	0.856	0.859	0.861	0.864	0.867	0.870	0.873	0.875	0.878	0.881
62	0.884	0.887	0.890	0.893	0.896	0.899	0.902	0.905	0.908	0.911	0.914	0.917
63	0.920	0.923	0.927	0.930	0.933	0.936	0.940	0.943	0.946	0.949	0.953	0.956
64	0.959	0.963	0.966	0.970	0.973	0.977	0.981	0.984	0.988	0.991	0.995	0.998
65	1.00											

- 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 65 Additional Pension where contracts were exercised before 1 April 2011
- 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
- 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised
- 4) Factors allow for increases based on RPI before coming into payment and PI Act increases in payment



Table ER6 - STSS, NPA 65, Additional Pension, contract exercised on or after 1 April 2011

Age						Comple	eted Months	3				
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.619	0.621	0.623	0.625	0.628	0.630	0.632	0.634	0.637	0.639	0.641	0.643
56	0.646	0.648	0.651	0.653	0.655	0.658	0.660	0.663	0.665	0.667	0.670	0.672
57	0.675	0.677	0.680	0.683	0.685	0.688	0.690	0.693	0.695	0.698	0.701	0.703
58	0.706	0.709	0.711	0.714	0.717	0.720	0.722	0.725	0.728	0.731	0.733	0.736
59	0.739	0.742	0.745	0.748	0.751	0.754	0.757	0.760	0.763	0.766	0.769	0.772
60	0.775	0.778	0.781	0.785	0.788	0.791	0.794	0.797	0.801	0.804	0.807	0.810
61	0.813	0.817	0.820	0.824	0.827	0.831	0.834	0.838	0.841	0.845	0.848	0.852
62	0.855	0.859	0.863	0.866	0.870	0.874	0.878	0.881	0.885	0.889	0.893	0.896
63	0.900	0.904	0.908	0.912	0.916	0.921	0.925	0.929	0.933	0.937	0.941	0.945
64	0.949	0.954	0.958	0.962	0.967	0.971	0.976	0.980	0.985	0.989	0.993	0.998
65	1.00											

- 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 65 Additional Pension where contracts were exercised on or after 1 April 2011
- 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
- 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised
- 4) Factors allow for increases based on the PI Act both prior to and in payment



Appendix C: Early retirement factor tables - STPS

Table ER7 - STPS, Active members, All NPAs, Full retirement earned pension

Age						Complete	ed Months					
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.619	0.621	0.623	0.625	0.628	0.630	0.632	0.634	0.637	0.639	0.641	0.643
56	0.646	0.648	0.651	0.653	0.655	0.658	0.660	0.663	0.665	0.667	0.670	0.672
57	0.675	0.677	0.680	0.683	0.685	0.688	0.690	0.693	0.695	0.698	0.701	0.703
58	0.706	0.709	0.711	0.714	0.717	0.720	0.722	0.725	0.728	0.731	0.733	0.736
59	0.739	0.742	0.745	0.748	0.751	0.754	0.757	0.760	0.763	0.766	0.769	0.772
60	0.775	0.778	0.781	0.785	0.788	0.791	0.794	0.797	0.801	0.804	0.807	0.810
61	0.813	0.817	0.820	0.824	0.827	0.831	0.834	0.838	0.841	0.845	0.848	0.852
62	0.855	0.859	0.863	0.866	0.870	0.874	0.878	0.881	0.885	0.889	0.893	0.896
63	0.900	0.904	0.908	0.912	0.916	0.921	0.925	0.929	0.933	0.937	0.941	0.945
64	0.949	0.954	0.958	0.962	0.967	0.971	0.976	0.980	0.985	0.989	0.993	0.998
65	1.000											

- 1) These factors are to be used for calculating the actuarial reduction on early retirement for STPS benefits
- 2) These factors apply only to members who are currently in active service seeking to retire early
- 3) These factors are to be used regardless of the member's NPA
- 4) These factors need to be used in combination with the standard reduction which applies (for a maximum of 3 years) between age 65 and NPA
- 5) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor in combination with the standard reduction (if any)
- 6) Reduced benefits are to be calculated before any lump sum commutation option is exercised



Table ER8 – STPS, Deferred members, All NPAs, Full retirement earned pension STPS, Active and Deferred members, All NPAs, Additional Pension and pension debits STPS, Pension credit members, All NPAs

Period to	Completed Months												
NPA Years	0	1	2	3	4	5	6	7	8	9	10	11	
0	1.000	0.998	0.993	0.988	0.984	0.979	0.974	0.970	0.965	0.960	0.955	0.951	
1	0.946	0.942	0.937	0.933	0.929	0.924	0.920	0.916	0.912	0.907	0.903	0.899	
2	0.894	0.890	0.886	0.883	0.879	0.875	0.871	0.867	0.863	0.859	0.855	0.851	
3	0.847	0.843	0.840	0.836	0.833	0.829	0.825	0.822	0.818	0.815	0.811	0.807	
4	0.804	0.800	0.797	0.794	0.790	0.787	0.784	0.780	0.777	0.774	0.770	0.767	
5	0.764	0.761	0.758	0.754	0.751	0.748	0.745	0.742	0.739	0.736	0.733	0.730	
6	0.727	0.724	0.721	0.718	0.715	0.712	0.710	0.707	0.704	0.701	0.698	0.695	
7	0.693	0.690	0.687	0.685	0.682	0.679	0.677	0.674	0.671	0.669	0.666	0.663	
8	0.661	0.658	0.656	0.653	0.651	0.648	0.646	0.643	0.641	0.639	0.636	0.634	
9	0.631	0.629	0.627	0.624	0.622	0.620	0.617	0.615	0.613	0.610	0.608	0.606	
10	0.604	0.601	0.599	0.597	0.595	0.593	0.591	0.589	0.586	0.584	0.582	0.580	
11	0.578	0.576	0.574	0.572	0.570	0.568	0.566	0.564	0.562	0.560	0.558	0.556	
12	0.554	0.552	0.550	0.548	0.546	0.544	0.542	0.541	0.539	0.537	0.535	0.533	
13	0.531												

- 1) These factors are to be used for calculating the actuarial reduction on early retirement for STPS benefits
- 2) These factors apply to deferred members or pension credit members seeking to retire early
- 3) These factors are to be used for any Additional Pension and pension debits an active or deferred member may have
- 4) Factors should be selected with reference to the period to the member's NPA (in years and months, with part months rounded up to the nearest month).
- Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
- 6) For those members who made a buy-out election, the factors above need to be used in combination with factor Table ER9 in line with GAD guidance
- 7) Reduced benefits are to be calculated before any lump sum commutation option is exercised



Table ER9 - STPS, Deferred members, All NPAs, Full retirement earned pension subject to a buy-out election

Age						Complet	ed Months					
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.619	0.621	0.623	0.625	0.628	0.630	0.632	0.634	0.637	0.639	0.641	0.643
56	0.646	0.648	0.651	0.653	0.655	0.658	0.660	0.663	0.665	0.667	0.670	0.672
57	0.675	0.677	0.680	0.683	0.685	0.688	0.690	0.693	0.695	0.698	0.701	0.703
58	0.706	0.709	0.711	0.714	0.717	0.720	0.722	0.725	0.728	0.731	0.733	0.736
59	0.739	0.742	0.745	0.748	0.751	0.754	0.757	0.760	0.763	0.766	0.769	0.772
60	0.775	0.778	0.781	0.785	0.788	0.791	0.794	0.797	0.801	0.804	0.807	0.810
61	0.813	0.817	0.820	0.824	0.827	0.831	0.834	0.838	0.841	0.845	0.848	0.852
62	0.855	0.859	0.863	0.866	0.870	0.874	0.878	0.881	0.885	0.889	0.893	0.896
63	0.900	0.904	0.908	0.912	0.916	0.921	0.925	0.929	0.933	0.937	0.941	0.945
64	0.949	0.954	0.958	0.962	0.967	0.971	0.976	0.980	0.985	0.989	0.993	0.998
65	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
66	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
67	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
68	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
69	1.000											

- 1) These factors are to be used for calculating the actuarial reduction on early retirement for STPS benefits
- 2) These factors apply to deferred members who made a buy-out election
- 3) These factors are to be used in combination with factor Table ER8 in line with GAD guidance



Appendix D: Principal assumptions underlying factors

Financial assumptions

Nominal discount rate	4.448% pa
CPI	2.00% pa
RPI	3.15% pa
Real discount rate (in excess of CPI)	2.40% pa
Real discount rate (in excess of RPI)	1.25% pa

Mortality assumptions

Base mortality tables and adjustments

Male members 119% of S2NMA_L (as per 2016

valuation)

Female members Age dependent adjustments to

S1NFA_L (as per 2016 valuation):

84% up to age 79 97% at ages 80 to 84 113% at ages 85 to 89 122% from age 90

Future mortality improvements Based on ONS principal UK

population projections 2016

Year of Use 2020

Other assumptions

Proportion of male members for unisex factors 30%

Allowance for commutation Nil other than for mandatory lump sum

cases



Appendix E: Limitations

- E.1 This guidance should not be used for any purpose other than those set out in this guidance.
- E.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.
- E.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.
- E.4 This guidance only covers the actuarial principles around the calculation and application of early retirement factors. Any legal advice in this area should be sought from an appropriately qualified person or source.
- E.5 Scheme managers and administrators should satisfy themselves that early retirement calculations and benefit awards comply with all legislative requirements including, but not limited to, tax and contracting-out requirements.
- E.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 SPPA and GAD. Under no circumstances should this guidance take precedence over the Regulations. Administrators should ensure that they comply with all relevant Regulations.